COMPUTER +VIDEO GAMES

CONTENTS

A message from Ideas Central…

HI… Melissa Ravenflame, here, co-ordinator of IDEAs Central. Welcome to another superb *Computer + Video Games* Book of Games — 32 pages packed with great listings which you should find great fun. They will help improve your programming skills as well.

Otiss, Big Red and B-Con have given the listings a good going over so they should be free of bugs. But if you do have any problems don't hesitate to call the Bug Hunters.

Bluff and bamboozlement are the weapons you'll need to work your way through the world of espionage.

Fun in the farmyard as the Farmer Giles has an egg-citing time.

There's no business like snow business as you cope with the ski slopes.

A special treat for QL owners Car and intelligence will be needed in this case.

Mission Impossible? Time will tell with this alien adventure.

Squeals on wheels … so get into gear for race track action.

A taxing game. The Inland Revenue is out to get a lot of money.

Dares in the air as you fly close to the ground and destruction.

TREACHERY

IT IS THE YEAR 1984 AND THANKFULLY BIG BROTHER IS STILL JUST A DISTANT NIGHTMARE. YET, A MENACE JUST AS PERILOUS THREATENS THE WORLD....

THE SINISTER PROFESSOR SCHWEINSTEIN!

WHEN DETONATED, IT SIMPLY WIPES CLEAN THE MEMORIES OF ANYONE WITHIN TEN MILES OF THE EXPLOSION!

EVEN WHEN IT IS DOING NOTHING, IT HAS A TENDENCY TO CAUSE RANDOM OUTBREAKS OF AMNESIA FOR MILES AROUND!

TIK TAK FIT

SCHWEINSTEIN HAS ALSO PERFECTED A SUPERB DELIVERY SYSTEM FOR HIS WEAPON, THE MANDROID!

IN REALITY AN ANDROID, IT SO CLOSELY RESEMBLES A MAN THAT IT IS VIRTUALLY UNDETECTABLE.

CHORTLE

HEHEHEH!

WITH THE MINDBOMB CONCEALED IN THE MANDROID'S ABDOMEN, SCHWEINSTEIN IMAGINED HE COULD BLACKMAIL THE WORLD.

HOWEVER, JUST AS HIS CREATION WAS COMPLETE, AN ACCIDENT OCCURED AND SCHWEINSTEIN BECAME THE FIRST VICTIM OF HIS OWN WEAPON....

FIZZ

AFTER MANY YEARS OF SECRET RESEARCH, SCHWEINSTEIN SUCCEEDED IN CREATING WHAT COULD BE THE ULTIMATE WEAPON....

A DEVICE HE CALLED THE MINDBOMB!

HE FORGOT EVERYTHING!

HE FORGOT ABOUT THE MANDROID AND ITS HOMING BEACON....

DUHHHHH?

HE FORGOT ABOUT THE MINDBOMB AND ITS REMOTE FIRING BUTTON....

HE EVEN FORGOT ABOUT HIS TWO HOLLOW TEETH, WHICH CONTAIN THE AMNESIA ANTIDOTE AND THE ENTIRE HISTORY OF HIS RESEARCHES ON MICRO-DISK.

HE ALSO FORGOT ABOUT THE BLACKMAIL LETTERS HE SENT TO THE BRITISH AND THE SOVIETS!

D□#!?+×!

NOW MI6 AND THE KGB ARE SEARCHING DESPERATELY FOR SCHWEINSTEIN, HIS FIRING BUTTON AND HIS HOMING BEACON.

SCHWEINSTEIN IS A BROKEN MAN, ROAMING THE URBAN WILDERNESS IN SEARCH OF HIS LOST IDENTITY....

SNIFF, KOFF!

WHOEVER FINDS HIM FIRST WILL HAVE PULLED OFF A TREMENDOUS INTELLIGENCE COUP.

MEANWHILE, THE MANDROID IS WANDERING ACROSS EUROPE!

THEY KNOW WHICH CITY IT IS IN AT ANY ONE TIME BY THE INCREASED INCIDENCE OF AMNESIA. BEYOND THAT, THEY CAN GO NO FURTHER IN TRACKING IT DOWN.

TAK TAK! TAK TAK! TAK TAK!

WHICHEVER SIDE GAINS CONTROL OF THE HOMING BEACON AND FIRING BUTTON WILL FIND IT EASY TO WIPE OUT THE ENEMY'S INTELLIGENCE NETWORK COMPLETELY....

LONDON AND MOSCOW ARE IN DANGER OF LOSING THEIR MINDS!

TREACHERY

Treachery is a tricky business at the best of times and you can be sure that the "friend" you are playing will be doing his worst to double-cross you. Bluff and bamboozlement are the weapons to use. A knowing smile or a subtle twitch of an eyebrow as you read through your agents' reports can be enough to send your opponent into a frenzied panic. But beware! He won't start tearing his hair out. He'll just nod calmly at you as if to say: "Yes, you've fallen for my trap."

LESSON ONE: IT'S FOR YOU-HOO!

Sending, receiving and intercepting messages is the key to success in Treachery. No self-respecting spymaster forgets that every order he sends and every report he receives may have been intercepted en route by the enemy and a clever spymaster uses this fact to his advantage.

Only a real traitor will betray your messages to the enemy and that betrayal will result in a message reporting interception to enemy HQ. With any luck, one of your agents will himself intercept the message of interception and report it back to your HQ. You then discover the identity of the traitor in your midst and you also know that your intercepting agent can be completely trusted. If he really belonged to the enemy, he would never have sent in an interception report.

So, in the early stages, it's a good idea to send orders by the longest routes possible in the hope that they get intercepted. At the same time, you should call in reports by the shortest and safest routes back to HQ since they may carry vital information you definitely don't want betrayed to the enemy.

LESSON TWO: THE BEST MOLES STAY UNDERGROUND

Until you have some idea of which agents are to be trusted, the best action is no action. If you use your agents James Bond fashion and leave a trail of dead bodies across Europe, you are very likely to lose the game. Your own agents become prominent targets, you waste time that can be more profitably spent gathering information and you are quite likely to bump off someone who is not an enemy agent.

Don't forget that even enemy agents can be very useful so long as you know who they are. They will be gathering information too — information that you can intercept and use to your own advantage.

Relocating your agent in a different city should only be done of necessity — you waste valuable spying opportunities and you might, in fact, be moving an enemy double-agent to a better position! Instead, the first few turns should be spent making innocuous "searches" in the cities where you have agents. Soon you will build up a working knowledge of who to trust. Only then should you begin to think about new stations for your agents.

A vital task is to establish secure routes for your orders and reports by moving men you know you can rely on into gaps or suspect links in your communications.

Appropriately enough, Berlin, notorious for its wealth of spies, is a key centre for routing messages through. Without a man in Berlin, your flexibility in sending orders and calling in reports is severely limited and it is the one place where you might allow yourself the luxury of eliminating the opposition once and for all.

Another essential task is to make sure you have a trusted mole close to or in the enemy HQ, ready to intervene if the opposition finds Schweinstein first and makes a break for home.

LESSON THREE: A SNEAK IN TIME SAVES NINE

Above all, you must be sneaky. Not only is it vital in winning the game, it's also great fun! How sneaky you can be depends on the calibre of your opponent — if you use employing tortuously subtle ruses against a blockhead — but it always offers rewarding opportunities for creative thinking.

One of my favourites is to send orders to an agent to kill your own Master Spy but to send them by an incomplete route so that they never actually arrive! You make sure, however, that the route includes a traitor who will betray your orders to the enemy. Your opponent immediately gets the impression that you have discovered one of his triple agents and have decided to eliminate him. He never suspects for one moment that you would kill your own Master Spy and now believes he knows an agent he can trust!

LESSON FOUR: DON'T PANIC

Never lose your cool. Rushing into action with all guns blazing is a tempting recourse during a crisis but calm, logical thinking will usually find a quiet solution to the problem. Remember, it's Smiley, not Bond, who wins at Treachery.

```
10 '    *****************************
20 REM  **                TREACHERY  **
30 '    **                            **
40 '    ** Converted From Spectrum    **
50 '    ** & Commodore Listings in    **
60 '    ** Computer  & Video Games     **
70 '    *****************************
80 CLEAR
90 MODE 1
100 WINDOW#1,11,37,5,22:PAPER#1,0
110 ON ERROR GOTO 7750
120 GOTO 3420
130 '    *****************************
140 REM  ** Print Message Sheet **
150 '    *****************************
160 CLS#1
170 PLOT 158,336,2:DRAWR 438,0:DRAWR 0-
294,-438,0:DRAWR 0,294
180 PEN 1
190 RETURN
200 '    *****************************
210 REM  ** Start of Turn Page **
220 '    *****************************
230 CLS:CLS#1:x=3:y=2:GOSUB 2940
240 PLOT 1,1,1:DRAW 1,399:DRAW 639,399:D
RAW 639,1:DRAW 1,1
250 GOSUB 160
260 FOR k=1 TO 3
270 LOCATE#1,4,1+k:PRINT#1, t$(k)
280 NEXT
290 LOCATE#1,5,5:PRINT#1,p$(P,1)
300 LOCATE#1,2,7:PRINT#1,"OPERATIONAL FI
LE"
310 LOCATE#1,2,9:PRINT#1,"REF:    ";p$(P,2)
320 LOCATE#1,2,11:PRINT#1,"Heidelberg Sc
hweinstein"
330 LOCATE#1,2,13:PRINT#1,"GRADE 1 ACCES
S ONLY"
340 LOCATE#1,2,15:PRINT#1,"Enter Clearan
ce Code"
350 LOCATE#1,4,16:PRINT#1,STRING$(6,210)
360 GOSUB 7,200,25.5
370 ds=""'FOR k=1 TO 6
380 k$=INKEY$:IF k$="" THEN GOTO 380
390 IF k$="a" OR k$="z" THEN GOTO 380
400 IF k$>CHR$(ASC("a")-32):s$=s$+k$
410 LOCATE#1,a9,a$:PRINT#1,k$
420 IF INKEY$<>"" THEN 420
430 NEXT :IF da$=3 THEN GOSUB 160
440 IF s$<>p$(P,3) THEN PEN#1,2:LOCATE#
1,2:PRINT#1
,"IS INCORRECT":SOUND 7,1000,25,5:0
,7:FOR k=1 TO 1000:NEXT:LOCATE#1,9,17:PR
INT#1,"        ":GOTO 350
450 RETURN
460 '    *****************************
470 REM  ** End of Page **
480 '    *****************************
490 LOCATE#1,2,17:PRINT#1,CHR$(24),"KEY
COPY OR RETURN":CHR$(24)
500 SOUND 7,200,25.5
510 IF INKEY$(18)>-1 THEN GOTO 550
520 IF INKEY(9)>-1 THEN 540
530 GOTO 510
540 ' ':GOSUB 7620
550 GOSUB 160
560 LOCATE#1,2,2:PRINT#1,p$(P,1),"DAY"
day
570 LOCATE#1,2,3:PRINT#1,"INCOMING REPOR
```

```
T"
590 LOCATE#1,2,5:PRINT#1,"PRESS KEY FOR
YOUR AGENT"
600 IF INKEY$:IF k$="" THEN 600
610 IF s$=""  THEN RETURN
620 IF k$="a" AND k$<="z" THEN a9=ASC(k
$)>-96:GOTO 650
630 IF k$="0" AND k$<="9" THEN a9=ASC(k
$)-21:GOTO 650
640 GOTO 600
650 IF ASC(n$(a9),4)>=0 THEN GOTO 610
660 crank=ASC(n$(a9,P+1))
670 erank=ASC(n$(a9,4-P))
680 IF orank>erank AND ASC(MID$(f$(1,a9)
,5,1))>0 THEN GOTO 720
690 LOCATE#1,2,7:PRINT#1,CHR$(24),"  NO R
EPORT IS AVAILABLE":CHR$(24)
700 FOR k=1 TO 500:NEXT
710 RETURN
720 IF ASC(MID$(f$(1,a9),2,1))=0 THEN 78
0
730 m1=ASC(MID$(f$(1,a9),2,1))
740 m3=ASC(MID$(f$(1,a9),3,1))
750 m6=ASC(MID$(f$(1,a9),4,1))
760 f$(1,a9)=LEFT$(f$(1,a9)1)+CHR$(0)+M
ID$(f$(1,a9),3)
770 GOTO 820
780 m4=1:' IF ASC(LEFT$(f$(1,a9),1))>>1 TH
EN m1=6
790 m5=ASC(MID$(f$(1,a9),6))
800 m6=0
810 IF a9<>6 THEN f$(1,a9)=LEFT$(f$(1
,a9),7,8)+RIGHT$(f$(1,a9),2)
820 m3=#
830 m3=#
840 m4=day=1
850 IF ASC(MID$(f$(1,a9),4)+CHR$(ASC(
MID$(f$(1,a9),5,1))-1)+MID$(f$(1,a9),6)
860 m5=ASC(m2)+m1+CHR$(m2)+CHR$(m3)+CHR$(m
4)+CHR$(m5)+CHR$(m6)
870 from=ASC(n$(a9))
880 type=1:IF P=2 THEN de=8 ELSE de=18
890 LOCATE#1,2,5:PRINT#1,
900 LOCATE#1,2,5:PRINT#1,LEFT$(n$(P,a9)),"TO ",M
ID$(P$(P,1):GOSUB 2360
910 IF s$="X" THEN GOTO 560
920 num=stack-1:md=3
930 GOSUB 160
940 LOCATE#1,2,2:PRINT#1,p$(P,1),"DAY"
day
950 LOCATE#1,2,3:PRINT#1,"INCOMING REPOR
T"
960 IF s$=1 THEN LOCATE#1,2,5:PRINT#1,"RE
PORT HAS BEEN SENT BUT":LOCATE#1,2,6:PRI
NT#1,"IT HAS NOT BEEN RECEIVED":GOTO 490
970 s$=GOSUB 1020
980 LOCATE#1,2,6:PRINT#1
990 '    *****************************
1000 REM ** Decode Message **
1010 '    *****************************
1020 ms=LEFT$(s$(md,me))
1030 m2=ASC(MID$(s$(md,me),2,1))
1040 m3=ASC(MID$(s$(md,me),3,1))
1050 m4=ASC(MID$(s$(md,me),4,1))
1060 m5=ASC(MID$(s$(md,me),5,1))
1070 m6=ASC(MID$(s$(md,me),6,1))
1080 s$=PEN#1,3:PRINT#1,STRING
$(25,255):PEN#1,1:s=s+1
1090 IF m1<10 THEN LOCATE#1,2,9:PRINT#1,
MID$(s$,m3),15)):"";x$(m2)
```

```
1100 IF m1>9 THEN LOCATE#1,2,y:PRINT#1,x
$(m2)" TO ",MID$(P$(m3,1),5)
1110 y=y+1
1120 ON m1 GOSUB 1170,1180,1190,1200,122
0,1230,1250,1260,1270,1300,1310,1320
1130 IF k=112 THEN ON (m1-12) GOSUB 1340
,1360,1380,1390,1410,1420
1140 y=y+1
1150 LOCATE#1,2,y:PEN#1,3:PRINT#1,STRING
$(25,255):PEN#1,1
1160 RETURN
1170 LOCATE#1,2,y:PRINT#1,"Go to ",u$(m6
):RETURN
1180 LOCATE#1,2,y:PRINT#1,"Kill ",x$(m5)
:RETURN
1190 LOCATE#1,2,y:PRINT#1,"Search ",w$(m
5):RETURN
1200 LOCATE#1,2,y:PRINT#1,"Steal ",u$(m6
);y=y+1
1210 LOCATE#1,2,y:PRINT#1,"From agent ",
x$(m5):RETURN
1220 LOCATE#1,2,y:PRINT#1,"Hide ",r$(m5)
:RETURN
1230 LOCATE#1,2,y:PRINT#1,"Transfer ",r$
(m5):y=y+1
1240 LOCATE#1,2,y:PRINT#1,"To agent ",x$
(m6):RETURN
1250 LOCATE#1,2,y:PRINT#1,"Change status
 to ",x$(m5):RETURN
1260 LOCATE#1,2,y:PRINT#1,"Switch HOMING
-BEACON ",o$(m5):RETURN
1270 LOCATE#1,2,y:PRINT#1,"Explode MIND-
BOMB":RETURN
1280 LOCATE#1,2,y:PRINT#1,"captu
red":y=y+1
1290 LOCATE#1,2,y:PRINT#1,"in ",u$(m6):R
ETURN
1300 LOCATE#1,2,y:PRINT#1,"locat
ed":y=y+1
1310 LOCATE#1,2,y:PRINT#1,"in ",u$(m6):R
ETURN
1320 LOCATE#1,2,y:PRINT#1,"SCHWEINSTEIN
was seen on":y=y+1
1330 LOCATE#1,2,y:PRINT#1,"DAY",m5," in "
:y=y+1
1340 LOCATE#1,2,y:PRINT#1,"I have got "
r$(m5):y=y+1
1350 LOCATE#1,2,y:PRINT#1,"From ",x$(m6)
:RETURN
1360 LOCATE#1,2,y:PRINT#1,"I have got
t":y=y+1
1370 LOCATE#1,2,y:PRINT#1,r$(m5):RETURN
1380 LOCATE#1,2,y:PRINT#1,"Goods have be
en stolen":RETURN
1390 LOCATE#1,2,y:PRINT#1,"Message stopp
ed on DAY",m5:y=y+1
1400 IF md=1 THEN LOCATE#1,2,y:PRINT#1,"
Contents not available":RETURN
1410 me=md-1:GOSUB 1020:RETURN
1420 LOCATE#1,2,y:PRINT#1,"Message passe
d on DAY",m4:y=y+1
1430 IF md=1 THEN LOCATE#1,2,y:PRINT#1,"
Contents not available":RETURN
1440 me=md-1:GOSUB 1020:RETURN
1450 '###############
1460 REM ## Give Orders ##
1470 '###############
1480 i$="":s=0:GOSUB 160:LOCATE#1,2,2:P
RINT#1,P$(P,1)," DAY":day
1490 LOCATE#1,2,4:PRINT#1,"OUTGOING ORDE
R'S"
1500 LOCATE#1,2,6:PRINT#1,"PRESS KEY FOR
YOUR AGENT"
1510 k$=INKEY$:IF k$="" THEN 1510
1520 IF k$="" THEN RETURN
1530 IF k$>="a" AND k$<="z" THEN m2=ASC(
k$)-96:GOTO 1560
1540 IF k$>="0" AND k$<="9" THEN m2=ASC(
k$)-21:GOTO 1560
1550 GOTO 1510
1560 IF ASC(m$(m2,4))=0 THEN 1510
1570 LOCATE#1,2,7:PRINT#1,MID$(P$(p,1),5
)," TO ",x$(m2)
1580 LOCATE#1,2,8:PRINT#1,"KEY 1  Go to
city"
1590 LOCATE#1,2,9:PRINT#1,"KEY 2  Kill a
gent"
1600 LOCATE#1,2,10:PRINT#1,"KEY 3  Searc
h city"
1610 LOCATE#1,2,11:PRINT#1,"KEY 4  Steal
 object"
1620 LOCATE#1,2,12:PRINT#1,"KEY 5  Hide
object"
1630 LOCATE#1,2,13:PRINT#1,"KEY 6  Trans
fer object"
1640 LOCATE#1,2,14:PRINT#1,"KEY 7  Chang
e status"
1650 LOCATE#1,2,15:PRINT#1,"KEY 8  Switc
h BEACON"
1660 LOCATE#1,2,16:PRINT#1,"KEY 9  Expl
ode MIND-BOMB"
1670 k$=INKEY$:IF k$="" THEN 1670
1680 IF k$<"1" OR k$>"9" THEN 1670
1690 m1=VAL(k$)
1700 FOR k=2 TO 9
1710 LOCATE#1,2,7+k:PRINT#1,"
1720 NEXT
1730 LOCATE#1,2,8:PRINT#1,"
":LOCATE#1,2,9
1740 ON VAL(k$) GOSUB 1840,1850,1860,187
0,1880,1890,1900,1910,1920
1750 m3=m4:m4=day
1760 m$=CHR$(m1)+CHR$(m2)+CHR$(m3)+CHR$(
m4)+CHR$(m5)+CHR$(m6)
1770 IF P=2 THEN from=25 ELSE from=18
1780 ty$=o$:de=ASC(m$(m2,1)):GOSUB 2360
1790 IF k$="X" THEN GOTO 1480
1800 RETURN
1810 '###############
1820 REM ## Parameter Selection ##
1830 '###############
1840 PRINT#1,"Go to ...":GOTO 1930
1850 PRINT#1,"Kill ...":GOSUB 2020:m5=a9
:LOCATE#1,7,8:PRINT#1,x$(m5):RETURN
1860 m5=ASC(m$(m2,1)):PRINT#1,"Search ",
w$(m5):RETURN
1870 PRINT#1,"Steal ...":GOSUB 2110:LOCA
TE#1,8,9:PRINT#1,r$(m5):LOCATE#1,8,9:PRI
NT#1,"from agent ...":GOSUB 2020:m6=a9:L
OCATE#1,13,9:PRINT#1,x$(m6):RETURN
1880 PRINT#1,"Hide ...":GOSUB 2110:LOCAT
E#1,7,8:PRINT#1,r$(m5):RETURN
1890 PRINT#1,"Transfer ...":GOSUB 2110:L
OCATE#1,11,8:PRINT#1,r$(m5):LOCATE#1,2,9
:PRINT#1,"to agent ...":GOSUB 2020:m6=a9
:LOCATE#1,11,9:PRINT#1,x$(m6):RETURN
1900 PRINT#1,"Change status to ...":GOSU
B 2200:LOCATE#1,23,8:PRINT#1,x$(m5):RETU
RN
1910 PRINT#1,"Switch HOMING-BEACON ...":
GOSUB 2270:LOCATE#1,23,8:PRINT#1,o$(m5):
RETURN
```

```
1920 PRINT#1,"Explode MIND-BOMB":RETURN
1930 l=8:m$=ASC(m$(m2,1)):FOR k=1 TO
1940 k$=MID$(k$,m$),k,1):IF k$=" " THEN
1-k-1:k=8:GOTO 1960
1950 LOCATE#1,2,10+k:PRINT#1,"KEY";k;w$
ASC(k$)-64:
1960 NEXT
1970 k$=INKEY$:IF k$="" THEN 1970
1980 IF k$="1" OR k$=RIGHT$(STR$(l),1)
THEN 1970
1990 GOSUB 2320
2000 m$(m2)=MID$(w$(m$),VAL(k$),1)-64:L
OCATE#1,2,9+VAL(k$):PRINT#1,"   ":RETURN
2010 REM ## Key in Agent ##
2020 LOCATE#1,2,11:PRINT#1,"PRESS KEY FO
R AGENT"
2030 a$=INKEY$:IF a$="" THEN 2030
2040 IF k$="a" AND k$<="z" THEN a9=ASC(
k$)-96:GOTO 2070
2050 GOTO 2030
2060 REM ## Key in Object ##
2070 IF ASC(k$)=a9:a9=0 THEN 2030
2080 l=1:GOSUB 2320
2090 RETURN
2100 REM ## Key in Object ##
2110 FOR l=1 TO 3
2120 LOCATE#1,2,10+k:PRINT#1,"KEY";k;r$(
k)
2140 NEXT
2150 k$=INKEY$:IF k$="" THEN 2140
2160 IF k$="1" OR k$="3" THEN 2140
2170 l=3:GOSUB 2320
2180 GOTO 2160
2190 REM ## Key in Status ##
2200 FOR l=1 TO 3
2210 LOCATE#1,2,10+k:PRINT#1,"KEY";k;s$(
k)
2220 NEXT
2230 k$=INKEY$:IF k$="" THEN 2230
2240 IF k$="1" OR k$="3" THEN 2230
2250 GOTO 2160
2260 REM ## Key in ON/OFF ##
2270 LOCATE#1,2,11:PRINT#1,"KEY 1 ON":LO
CATE#1,2,12:PRINT#1,"KEY 2 OFF"
2280 k$=INKEY$:IF k$="" THEN 2280
2290 IF k$="1" OR k$="2" THEN 2280
2300 GOTO 2310
2310 l=2
2320 FOR k=1 TO 1+l:LOCATE#1,2,9+k:PRINT
#1,"        ":NEXT:RETU
RN
2330 REM ############################
2340 REM ## Message Routing ##
2350 REM ############################
2360 LOCATE#1,2,10:PRINT#1,"Choose route
for message"
2370 LOCATE#1,2,11:PRINT#1,"by Pressing"
2380 LOCATE#1,2,12:PRINT#1,"agent keys"
2390 LOCATE#1,2,13:PRINT#1,"Destination
of message"
2400 LOCATE#1,2,14:PRINT#1,"will end our
key entry"
2400 LOCATE#1,2,16:PRINT#1,"SPACE will c
ancel"
2410 LOCATE#1,2,17:PRINT#1,"Longest rout
e = 8 keys"
2420 k$=INKEY$:IF k$="" THEN 2420
2430 IF (k$<"0" AND k$>"9") AND (k$="a"
OR k$="z") AND k$<>" " THEN GOTO 2420
```

```
2440 IF k$=" " THEN k$="X":RETURN
2450 IF k$="" THEN k$="X":RETURN
2460 a$="":n=0:GOTO 2480
2470 k$=INKEY$:IF k$="" THEN 2470
2480 IF k$=" " AND l=8:GOSUB 2320:GOTO
2360
2490 IF k$="0" AND k$<="9" THEN k=ASC(k
$)-21:GOTO 2510
2500 IF k$="a" AND k$<="z" THEN k=ASC(k
$)-36:GOTO 2510
2510 GOTO 2470
2520 IF ASC(k$,4)=0 THEN 2470
2530 k=ASC(MID$(k$,1)):LOCATE#1,2,10+n:PRIN
T#1,x$(k);" ",u$(k)
2540 n=n+1:a$=a$+CHR$(k):IF c=de AND (t$
=en OR de)=8:GOTO 2560
2550 IF n=9 THEN LOCATE#1,2,9:PRINT#1,CH
R$(24)" "THIS ROUTE IS TOO LONG ",CHR$(2
4):FOR k TO 500:NEXT:l=8:GOTO 2360:LO
CATE#1,2,9:PRINT#1,"        "
2560 IF INKEY$<>"" THEN 2560
2570 l=8:GOSUB 2320:LOCATE#1,2,10:PRINT#
1,"MESSAGE TO BE SENT VIA":FOR k=0 TO 2:
LOCATE#1,2,10+k
2580 FOR j=1 TO 3
2590 IF k#3>=n THEN GOTO 2630
2600 a$=ASC(MID$(k$,k#3+j,1))
2610 a$=ASC(MID$(w$(a9),"",#3+j,1))
2620 NEXT:NEXT
2630 NEXT:NEXT
2640 LOCATE#1,2,17:PRINT#1,CHR$(24);" KE
Y CLEAR; OR ENTER";CHR$(24)
2650 LOCATE#1,2,17:PRINT#1,CHR$(24);" KE
Y CLEAR; OR ENTER";CHR$(24)
2660 IF INKEY$<>-1 THEN GOSUB 7620:GOT
O 2700
2670 IF INKEY$18<>-1 THEN 2700
2680 IF INKEY$(47)<>-1 THEN RETURN
2690 GOTO 2660
2700 LOCATE#1,2,11:PRINT#1,"THE MESSAGE
IS BEING SENT"
2710 s#<3;stack=m$
2720 m=m$
2730 REM ###Message Interception ###
2740 REM ############################
2750 e=0:a9=1:w=LEN(m$):FOR k=1 TO 
2760 a9=ASC(MID$(k$,k,1)):tt=ASC(a9,1)
2770 IF e=0 OR VAL(z$(from),tt,1))
THEN e=1:GOTO 2840
2780 orank=rank=ASC(n$(a9,P+1):e=ASC(n$
a9,4+9))
2790 IF orank>=erank THEN GOTO 2840
2800 IF ASC(MID$(f$(2,a9),5,1)<>in THEN
AND ASC(MID$(f$(2,a9),im+5,1)=0 THEN in>=0
AND ASC(MID$(f$(2,a9),im+5,1)=0:stack
IN G0TO 2840
2810 in=in+1:f$(2,a9)=LEFT$(f$(2,a9),4)+
CHR$(in)+MID$(f$(2,a9):FOR
2820 f$(2,a9)=LEFT$(f$(2,a9),5)+CHR$(k)+
stack)MID$(f$(2,a9),im+6)
2830 IF ASC(n$(a9,4)<>0 THEN e=1:IF k=m
AND ASC(LEFT$(m$,1))10 AND ASC(n$(a9,4
>)=2 THEN e=0
2840 from=tt
2850 NEXT
2860 IF ASC(LEFT$(m$,1))>9 OR e=1 THEN 2
900
2870 IF orank=0 THEN 2840
2880 IF orank<erank AND ASC(n$(a9,5))<>0
THEN 2900
2890 n$(a9,5)=CHR$(stack)
```

8

```
2900 stack=stack+1:RETURN
2910 '  ********************
2920 REM ** Draw Flag **
2930 '  ********************
2940 IF m=2 THEN PEN 3
2950 FOR k=1 TO 14
2960 LOCATE x,y+k-1:PRINT u$(p,k)
2970 NEXT
2980 '  :RETURN
2990 '  ********************
3000 REM ** Player Tune **
3010 '  ********************
3020 '
3030 '
3040 '  ********************
3050 REM ** UDG Data **
3060 '  ********************
3070 DATA 255,255,252,248,241,225,246,25
5
3080 DATA 255,255,239,199,152,63,127,255
3090 DATA 255,255,255,247,251,251,251,12
3
3100 DATA 187,211,231,199,37,253,255,255
3110 '  ********************
3120 REM ** Various Strings **
3130 '  ********************
3140 DATA MI6 MOSCOW CONTROL
3150 DATA KGB MOSCOW CONTROL
3160 DATA SCHW.315b/0Z
3170 DATA LIO/ROBOTNIK/S-20
3180 DATA ON,OFF
3190 DATA ASLEEP,AWAKE,ACTIVE
3200 DATA SCHWEINSTEIN,FIRING BUTTON,HOM
ING BEACON
3210 DATA 4,3,3,4,3,2,3,2
3220 DATA 2.1,2,1,1,2,1,2
3230 DATA 2.1,2,1,1,2,1,2
3240 DATA 1,0,1,0,1,0,1,0
3250 DATA 1,0,1,0,0,1,0,1
3260 DATA 1,0,1,0,0,1,0,1
3270 DATA 0,1,0,1,1,0,1,0
3280 DATA 1,0,1,0,0,0,0,0
3290 DATA 0,0,0,0,0,0,0,0
3300 '  ********************
3310 REM ** Cities & Agents **
3320 '  ********************
3330 DATA AMSTERDAM,ALPHA,BELGRADE,BRAVO
,VIENNA,CHARLIE,PARIS,DELTA,OSLO,ECHO,LI
SBON,FOXTROT,MADRID,GOLF,TANGIER,HOTEL,W
ARSAW,IVAN,ROME,JULIET
3340 DATA ATHENS,KING,ISTANBUL,LIMA,BUCH
AREST,KING,NOBLE,PRAGUE,OSCAR,COPE
NHAGEN,PAPA,REYKJAVIK,QUIZ,LONDON,ROMEO,
BRUSSELS,SIERRA,DELTA,RENO
3350 DATA HELSINKI,UNCLE,BUDAPEST,VICTOR
,DUBLIN,WHISKEY,ZURICH,X-RAY,GENEVA,YANK
E,STOCKHOLM,ZULU
3360 DATA ZERO,ONE,TWO,THREE,FOUR,FIVE,S
IX,SEVEN,EIGHT,NINE
3370 DATA "PTSR     ","VMNKJC ","OVBJXT
","STLXGR  ","UZPRMG ","WRGH    ","RDJ
KHF ","KFG     ","YVOTPZ ","CBKGDX ","
NLHGJB ","YKHM    ","YLNBV  ","MLKB
","JVCT    ","EZITAR  ","UEW     ","EP
ASDGFW","ATDR    ","PIOCXDSR","YZEQ
","UVIPE   "
3380 DATA "GERF    ","TCJB  ","LMVIZU
","UVIPE
3390 '  ********************
3400 REM ** Game Start **
3410 '  ********************
```

```
3420 BORDER 13:INK 0,26:INK 1,0:INK 2,2
5:INK 3,6
3430 CLS:PEN 1
3440 LOCATE 12,1:PRINT"T R E A C H E R Y
"
3450 LOCATE 4,3:PRINT"When the ";:PEN 3:
PRINT"KGB ";:PEN 1:PRINT"and ";:PEN 2:PR
INT"MI6 ";:PEN 1:PRINT"wage a war of"
3460 LOCATE 3,4:PRINT"wits through the c
apitals of Europe."
3470 LOCATE 11,5:PRINT"nothing is simple
!"
3480 OPENOUT "dummy"
3490 MEMORY HIMEM-1
3500 CLOSEOUT
3510 '  ********************
3520 REM ** User Defined Graphics **
3530 '  ********************
3540 BORDER 9
3550 FOR char=251 TO 254
3560 FOR ch=1 TO 8
3570 READ a(ch)
3580 NEXT
3590 SYMBOL char,a(1),a(2),a(3),a(4),a(5
),a(6),a(7),a(8)
3600 NEXT
3610 SYMBOL 255,0,0,0,255,255,0,0,0
3620 '  ********************
3630 REM ** Top Secret Data **
3640 '  ********************
3650 t$(1,1)=CHR$(139)+CHR$(135)+CHR$(135
)+CHR$(135)+CHR$(133)+" "+CHR$(135)+CHR$
(135)+CHR$(135)+CHR$(133)+" "+CHR$(135)+
CHR$(135)+CHR$(135)+CHR$(135)+CHR$(133)+
" "+CHR$(135)+CHR$(135)+CHR$(135)+CHR$(1
35)+CHR$(133)+CHR$(138)
3660 t$(1,2)=CHR$(138)+" "+STRING$(2,133)
+CHR$(138)+CHR$(129)+"   "+CHR$(131)+CHR$(
133)+CHR$(138)+CHR$(135)+" "+CHR$(133)+
CHR$(138)+CHR$(135)+"   "+CHR$(138)
3670 t$(1,3)=CHR$(130)+" "+CHR$(131)+CHR$(
129)+CHR$(129)+" "+CHR$(131)+CHR$(131)+
CHR$(129)+CHR$(130)+"   "+CHR$(131)+CHR$(
129)+CHR$(130)+"   "+CHR$(131)+CHR$(129)+"
"+CHR$(130)
3680 '  ********************
3690 REM ** Construct Flags Strings **
3700 '  ********************
3710 rem "...is CTRL & O"
3720 DIM u$(6,2):u$(1,1)="3"+CHR$(213)+
CHR$(143)+CHR$(215)+"2"+CHR$(213)+STRING
$(3,143)+"2"+"3"+STRING$(3,143)+"2"+CHR$(213)+
CHR$(143)+CHR$(215)+"3"
3730 u$(1,2)="2"+CHR$(213)+CHR$(215)+"3"+CHR$(213)+STRIN
G$(3,143)+"2"+"3"+STRING$(3,143)+"2"+"2"
+STRING$(2,143)+CHR$(212)+"3"+CHR$(214)+"2"
3740 u$(1,3)="2"+CHR$(143)+CHR$(143)+CHR$(143)+CHR$(215)+"3"
+CHR$(213)+"3"+STRING$(3,143)+"2"+"3"+STRING$(3,143)+"2"
+CHR$(214)+"3"+CHR$(143)+CHR$(143)+CHR$(143)+"2"
3750 u$(1,4)="2"+CHR$(143)+CHR$(143)+CHR$(143)+CHR$(143)+
CHR$(215)+"3"+CHR$(213)+CHR$(143)+CHR$(215)
+CHR$(213)+"3"+STRING$(3,143)+"2"+"3"+STRING$(3,143)+"2"+CHR$(214)+
CHR$(143)+CHR$(214)+"3"+STRING$(2,143)+"2"
3760 u$(1,5)="2"+STRING$(143)+CHR$(215)+"3"+
"2"+CHR$(213)+CHR$(143)+CHR$(215)+"3"+"
```

```
STRING$(3,143)+" "+CHR$(214)+CHR$(143)+C
HR$(212)+"2"+CHR$(214)+STRING$(3,143)
3770 u$(1,6)=STRING$(8," ")+"3"+STRING$(
3,142)+STRING$(8," ")+u$(1,6)
3780 u$(1,7)="3"+CHR$(214)+STRING$(19,143)+u$(1,6)+"
"+u$(1,7)
3790 u$(1,10)="2"+STRING$(3,143)+" "+CHR
$(212)+"2"+CHR$(214)+CHR$(143)+CHR$(21
2)"+STRING$(3,143)
3800 u$(1,11)="2"+CHR$(215)+"2"+CHR$(21
3)"+STRING$(3,143)+CHR$(214)+CHR$(212)+"2"
+CHR$(214)+"2"+CHR$(215)+STRING$(3,143)
3810 u$(1,12)=CHR$(215)+"3"+CHR$(214)+"3
"+CHR$(214)+CHR$(143)+CHR$(212)+"3"+CHR$(
214)+CHR$(143)+"3"+" "+STRING$(3,143)+"
"+CHR$(215)+"2"+CHR$(213)+STRING$(3,143)
3820 u$(1,13)="2"+CHR$(212)+"3"+CHR$(214
)+CHR$(143)+CHR$(212)+"2"+CHR$(214)+STRI
NGR$(3,143)+"3"+" "+STRING$(3,143)+" "+"2"
+STRING$(3,143)+CHR$(215)+"2"+CHR$(213)
+CHR$(143)+CHR$(215)+"2"+CHR$(213)
3830 u$(1,14)=CHR$(212)+"3"+CHR$(214)+CH
R$(212)+"2"+CHR$(143)+" "+"2"+STRING$(3
,143)+CHR$(215)+"3"+CHR$(215)+"2"+STRING$(3,143)+
CHR$(215)+CHR$(213)+CHR$(143)
3840 l$=STRING$(19,143)
3850 FOR l=1 TO 15
3860 u$(2,1)=l$
3870 NEXT
3880 MID$(u$(2,3),16,2)=CHR$(251)+CHR$(2
53)
3890 MID$(u$(2,3),16,2)=CHR$(252)+CHR$(2
54)
3900 REM j$=""b$=""c$=""d$=""e$=""
f$=""g$=""h$=""i$=""j$=""k$=
"l$=""p$=""q$=""z$=""m$=""
3910 '##################
3920 REM Print Flags ##
3930 '##################
3940 p=2 x=20 y=7
3950 GOSUB 2940
3960 p=1 y=3 y=11
3970 GOSUB 2940
3980 '##################
3990 REM Read Various Strings ##
4000 '##################
4010 DIM P$(2,2)
4020 READ P$(1,1),P$(2,1)
4030 DIM o$(2,2) READ o$(1,2),o$(2,2)
4040 DIM g$(3) READ g$(1),g$(2),g$(3)
4050 DIM s$(3,16)
4060 DIM o$(1),o$(2)
4070 READ y$(1),y$(2),y$(3)
4080 READ r$(1),r$(2),r$(3)
4090 DIM w$(36,5),z$(2,36)
4100 FOR k=1 TO 26 n$(k,1)=CHR$(k)+CHR$(k
)
4110 FOR k=1 TO 31 n$(k)=CHR$(18)+CHR$(k
)
4120 FOR k=32 TO 26 n$(k)=CHR$(16)+CHR$(k
)
4130 FOR k=1 TO 36 FOR j=2 TO 5 w$(k,j)=
CHR$(32) NEXT NEXT
4140 w$="" FOR k=1 TO 13 w$=w$+CHR$(0) N
EXT
```

```
4150 RANDOMIZE TIME FOR k=1 TO 36
4160 READ a,b
4170 c=INT(RND$(36)+1 IF ASC(n$(c,2))<>32
THEN GOTO 4170
4180 n$(c,2)=CHR$(a) n$(c,3)=CHR$(b)
4190 IF k>1 n$(c,4)=CHR$(b) m$(c,4)=CHR$(1)
4200 IF c=1 AND b=0 OR (a=0 AND b=1) T
HEN IF d$(1,c)=CHR$(b) n$(c,4)=CHR$(8)
4210 m$(2,c)=f$(1,c)
4220 m$(c,5)=f$(1,c)
4230 NEXT
4240 DIM s$(),o(6,5),s(4)
4250 BORDER 20
4260 '##################
4270 REM Read Cities & Agents ##
4280 '##################
4290 DIM w$(26),w$(36)
4300 FOR k=1 TO 26
4310 READ w$(k)
4320 NEXT
4330 FOR k=27 TO 36
4340 READ w$(k)
4350 NEXT
4360 DIM y$(26)
4370 FOR k=1 TO 26
4380 READ y$(k)
4390 NEXT
4400 BORDER 6
4410 '##################
4420 REM City to City Distance ##
4430 '##################
4440 DIM z$(26) GOSUB 8100
4450 GOSUB 8100 REM Screen Copy M/C
4460 '##################
4470 REM Game Start ##
4480 '##################
4490 BORDER 24 zzz=FRE("")
4500 day=3
4510 BORDER 26
4520 stack=1
4530 P=1
4540 r=INT(RND$26)+1 IF r=18 OR r=25 THE
N 4540
4550 s(1)=r schw=0
4560 FOR j=1 TO 5 GOSUB 6210 NEXT
4570 r=INT(RND$26)+1 IF r=18 OR r=25 THE
N 4570
4580 bta=0 s(1)=r
4590 r=INT(RND$26)+1 IF r=18 OR r=25 OR
r=btloc THEN 4590
4600 bca=0 bcloc=r bcon=2
4610 maxloc=100 maxv=bcon
4620 exPlod=0
4630 GOTO 4980
4640 '##################
4650 REM Print Agent Ranks ##
4660 '##################
4670 GOSUB 3600
4680 LOCATE#1,2,2 PRINT#1,MID$(P$(P,1),1
,4),"RANK & AGENT DAY",day
4690 PEN#1,3
4700 y=4 x=2
4710 FOR l=1 TO 36
4720 IF ASC(n$(k,4))=0 OR ASC(n$(k,P+1))
=0 THEN GOTO 4770
4730 LOCATE#1,x,y PRINT#1,n$(k,P+1)
4740 LOCATE#1,x,y PRINT#1,a;" ";o$(k)
4750 y=y+1
4760 IF y=15 THEN y=4 x=14
4770 NEXT
4780 PEN#1,1
```

```
4790 GOTO 490
4800 ' ####################
4810 REM ## List Agent Reports ##
4820 ' ####################
4830 GOSUB 160
4840 LOCATE#1,2,2:PRINT#1,MID$(p$(P,1),4):day
4850 y=4
4860 FOR k=1 TO 36
4870 IF ASC(m$(k,4))=0 THEN GOTO 4930
4880 orank=ASC(m$(k,P+1))
4890 erank=ASC(MID$(f$(1,k),5,1))
4900 IF orank<=erank OR ASC(MID$(f$(1,k),5,1))=0 THEN GOTO 4930
4910 LOCATE#1,x,y:PRINT#1,x$m$(k);" ";ASC(MID$(f$(1,k),5,1))
4920 y=y+1:IF y=15 THEN y=4 :x=14
4930 NEXT
4940 GOTO 490
4950 ' ####################
4960 REM ## Player Turn Reports ##
4970 ' ####################
4980 reports=0:GOSUB 230
4990 IF reports=5 THEN GOTO 5200
5000 GOSUB 160
5010 IF day=3 THEN GOTO 5200
5020 LOCATE#1,2,2:PRINT#1,p$(P,1)," DAY"
:day
5030 LOCATE#1,2,3:PRINT#1,"YESTERDAY'S FIELD REPORTS"
5040 LOCATE#1,2,6:PRINT#1,"KEY 1 List all agents"
5050 LOCATE#1,2,7:PRINT#1,"         and their rank"
5060 LOCATE#1,2,9:PRINT#1,"KEY 2 List agents to send and"
5070 LOCATE#1,2,10:PRINT#1,"     reports to send and"
5080 LOCATE#1,2,11:PRINT#1,"       how many reports"
5090 LOCATE#1,2,13:PRINT#1,"KEY 3 Call in a report"
5100 LOCATE#1,2,15:PRINT#1,"KEY 4 Finish with reports"
5110 LOCATE#1,2,16:PRINT#1,"       Give today's orders"
5120 k$=INKEY$:IF k$="" THEN GOTO 5120
5130 IF k$<"1" OR k$>"4" THEN GOTO 5120
5140 IF k$="1" GOSUB 4670:GOTO 4990
5150 IF k$="2" GOSUB 4830:GOTO 4990
5160 IF k$="3" GOSUB 560:reports=reports+1:GOTO 4990
5170 ' ####################
5180 REM ## Player Turn Orders ##
5190 ' ####################
5200 orders=0
5210 IF orders=3 THEN GOTO 5350
5220 GOSUB 160
5230 LOCATE#1,2,2:PRINT#1,p$(P,1)," DAY"
:day
5240 LOCATE#1,2,3:PRINT#1,"TODAY'S ORDERS"
5250 LOCATE#1,2,6:PRINT#1,"KEY 1 List all agents"
5260 LOCATE#1,2,7:PRINT#1,"         and the rank"
5270 LOCATE#1,2,9:PRINT#1,"KEY 2 Give an order"
5280 LOCATE#1,2,11:PRINT#1,"KEY 3 Finish with orders"
5290 LOCATE#1,2,12:PRINT#1,"       Operations over"
5300 LOCATE#1,2,13:PRINT#1,"         until tomorrow"
5310 k$=INKEY$:IF k$="" THEN GOTO 5310
5320 IF k$<"1" OR k$>"3" THEN GOTO 5310
5330 IF k$="1" THEN GOSUB 4670:GOTO 5210
5340 IF k$="2" THEN GOSUB 1480:orders=orders+1:GOTO 5210
5350 p=p+1:IF P<3 THEN GOTO 4980
5360 ' ####################
5370 REM ## End of Day ##
5380 ' ####################
5390 GOSUB 5550
5400 day=day+1
5410 FOR k=1 TO 16
5420 s$(1,k)=s$(k,2)
5430 s$(2,k)=s$(k,1)
5440 NEXT:stack=1
5450 m$="" :FOR k=1 TO 13:m$=m$+CHR$(0) :NEXT
5460 FOR k=1 TO 36
5470 f$(1,k)=f$(k,2)
5480 f$(2,k)=m$(k,4)+m$
5490 NEXT
5500 P=1
5510 GOTO 4980
5520 ' ####################
5530 REM ## Execute Orders ##
5540 ' ####################
5550 CLS
5560 GOSUB 160
5570 LOCATE#1,2,2:PRINT#1,"END OF DAY";day;CHR$(8);" ";TREACHERY"
5580 GOSUB 6210
5590 FOR k=1 TO 6:FOR j=1 TO 5:o(k,j)=0:
NEXT:NEXT
5600 no=0
5610 FOR k=1 TO 36
5620 o1=ASC(m$(k,5)):IF o1=0 THEN GOTO 5700
5630 no=no+1
5640 o(no,1)=ASC(LEFT$(s$,3),o1))
5650 o(no,2)=ASC(MID$(s$,3,o1),1))
5660 o(no,3)=ASC(MID$(s$,3,o1),5,1))
5670 o(no,4)=ASC(MID$(s$,3,o1),6,1))
5680 o(no,5)=ASC(MID$(s$,3,o1),1))
5690 s$(k,5)=CHR$(0)
5700 x=4
5710 y=4
5720 FOR o=1 TO no:IF o(o,1)=9 THEN GOSUB 6350
5730 NEXT
5740 FOR o=1 TO no:IF o(o,1)=1 THEN GOSUB 6350
5750 NEXT
5760 FOR o=1 TO no:IF o(o,1)=5 THEN GOSUB 6630
5770 NEXT
5780 FOR o=1 TO no:IF o(o,1)=6 THEN GOSUB 6750
5790 NEXT
5800 FOR o=1 TO no:IF o(o,1)=3 THEN GOSUB 6080
5810 NEXT
5820 FOR o=1 TO no:IF o(o,1)=4 THEN GOSUB 7210
5830 NEXT
5840 FOR o=1 TO no:IF o(o,1)=2 THEN GOSUB 7290
5850 NEXT
5860 FOR o=1 TO no:IF o(o,1)=8 THEN GOSU
```

```
B 7440
5870 NEXT
5880 FOR o=1 TO no:IF o(o,3)=7 THEN GOSU
B 7520
5890 NEXT
5900 FOR k=1 TO 36
5910 IF ASC(MID$(f$(2,k),2,1))>0 THEN f
$(2,k)=LEFT$(f$(2,k),4)+CHR$(ASC(MID$(f$
(2,k),5,1))+1)+MID$(f$(2,k),6)
5920 NEXT
5930 LOCATE#1,2,y:PRINT#1,"3 days ago SC
HWEINSTEIN":y=y+1
5940 LOCATE#1,2,y:PRINT#1,"Was seen in "
;w$(s(4)):y=y+1
5950 IF bcon=2 THEN GOTO 5970
5960 LOCATE#1,2,y:PRINT#1,"BEACON ON in
";w$(bcloc):y=y+1
5970 IF btag=0 THEN GOTO 6000
5980 LOCATE#1,2,y:PRINT#1,"FIRING BUTTON
detected":y=y+1
5990 LOCATE#1,2,y:PRINT#1,"in ";w$(btloc
):y=y+1
6000 IF explod=0 THEN GOTO 6120
6010 d=VAL(MID$(z$(manloc),bcloc,1))
6020 IF d=0 AND bcon=1 THEN GOTO 6110
6030 IF d=0 THEN k=8
6040 IF MID$(y$(manloc),k,1)<>" " THEN n
=n+1
6050 NEXT
6060 r=INT(RND*n)
6070 IF bcon=2 THEN manloc=ASC(MID$(y$(m
anloc),r,1))-64:GOTO 6110
6080 c=ASC(MID$(y$(manloc),r,1))-64
6090 IF VAL(MID$(z$(c),bcloc,1))=d THEN
GOTO 6060
6100 manloc=c
6110 LOCATE#1,2,y:PRINT#1,"MANDROID in "
;w$(manloc):y=y+1
6120 IF s(1)>18 AND s(1)<>25 THEN GOTO
490
6130 IF s(1)=18 THEN LOCATE#1,2,y:PRINT#
1,"SCHWEINSTEIN IN LONDON":y=y+2:LOCATE#
1,2,y:PRINT#1,"MI6 HAVE WON THE GAME":y=
y+2
6140 IF s(1)=25 THEN LOCATE#1,2,y:PRINT#
1,"SCHWEINSTEIN IN MOSCOW":y=y+2:LOCATE#
1,2,y:PRINT#1,"THE KGB HAVE WON THE GAME
":y+=2
6150 REM
6160 GOTO 6160
6170 STOP
6180 ' ###########################
6190 REM ## Move Schweinstein ##
6200 ' ###########################
6210 FOR k=4 TO 2 STEP-1
6220 s(k)=s(k-1)
6230 NEXT
6240 IF schwa>0 THEN RETURN
6250 n=0:FOR k=1 TO 8
6260 IF MID$(y$(s(1)),k,1)<>" " THEN n=n+1
6270 NEXT
6280 r=INT(RND*n)
6290 c=ASC(MID$(y$(s(1)),r,1))-64
6300 IF c=s(3) OR c=18 OR c=25 THEN 6280
6310 s(1)=c:RETURN
6320 ' ###########################
6330 REM ## Explode Mindbomb ##
6340 ' ###########################
6350 IF explod=0 THEN RETURN
6360 a9=o(o,2):IF btag>a9 THEN ob=2:GOTO
6900
```

```
6370 LOCATE#1,2,y:PRINT#1,"MIND-BOMB exp
lodes in":y=y+1
6380 LOCATE#1,2,y:PRINT#1,w$(manloc):y=
y+1
6390 IF manloc=18 THEN y=y+1:LOCATE#1,2,
y:PRINT#1,"MI6 HAVE WON THE GAME":P=
2:GOTO 6150
6400 IF manloc=25 THEN y=y+1:LOCATE#1,2,
y:PRINT#1,"THE KGB HAVE WON THE GAME":P=1:GO
TO 6150
6410 FOR k=1 TO 36
6420 IF ASC(m$(k,1))>manloc THEN GOTO 6470
6430 m$(k,4)=CHR$(0)
6440 IF btag=k THEN btag=0
6450 IF bcon=k THEN bcon=0
6460 IF schwa=k THEN schwa=0
6470 NEXT
6480 explod=1:RETURN
6490 ' ###########################
6500 REM ## Go to City ##
6510 ' ###########################
6520 a9=o(o,2):c=o(o,3)
6530 IF ASC(m$(a9,4))=0 THEN RETURN
6540 n$(a9,4)=CHR$(0)
6550 IF btag>a9 THEN btloc=c
6560 IF bcon>a9 THEN bcloc=c
6570 IF schwa>a9 THEN s(1)=c
6580 LOCATE#1,2,y:PRINT#1,x$(a9)," go to
";w$(c)
6590 y=y+1:RETURN
6600 ' ###########################
6610 REM ## Hide Object ##
6620 ' ###########################
6630 a9=o(o,2):ob=o(o,3)
6640 IF ASC(n$(a9,4))=0 THEN RETURN
6650 ON ob GOTO 6660,6680,6700
6660 IF schwa=0 THEN GOTO 6900
6670 schwa=0:RETURN
6680 IF btag=0 THEN GOTO 6900
6690 btag=0:RETURN
6700 IF bcon=0 THEN GOTO 6900
6710 bcon=0:RETURN
6720 ' ###########################
6730 REM ## Transfer Object ##
6740 ' ###########################
6750 a9=o(o,2):ob=o(o,3):to1=o(o,4):IF a
9=to1 THEN RETURN
6760 IF ASC(m$(a9,1))=0 OR ASC(m$(to1,4)
)=0 THEN RETURN
6770 fc=ASC(n$(a9,1)):tc=ASC(m$(to1,1))
6780 IF ASC(z$(fc),tc,1))>"1" THEN RETUR
N
6790 ON ob GOTO 6830,6860,6860
6800 IF schwa<>a9 THEN GOTO 6900
6810 schwa=c:s(1)=tc
6820 GOTO 6880
6830 IF btag=a9 THEN GOTO 6900
6840 btag=c:btloc=tc
6850 GOTO 6880
6860 IF bcon<>a9 THEN GOTO 6900
6870 bcon=c:bcloc=tc
6880 m$(2,to1)=LEFT$(f$(2,to1),1)+CHR$(1
3)+CHR$(ob)+CHR$(a9)+MID$(f$(2,to1),5)
6890 RETURN
6900 IF o(o,1)=4 THEN GOTO 6930
6910 m$(2,a9)=LEFT$(f$(2,a9),1)+CHR$(14)
+CHR$(ob)+MID$(f$(2,a9),4)
6920 RETURN
6930 m$(2,to1)=LEFT$(f$(2,to1),1)+CHR$(1
4)+CHR$(ob)+MID$(f$(2,to1),4)
6940 RETURN
```

```
6950 ' *****************
6960 REM ** Search City **
6970 ' *****************
6980 a9=o(o(o,2):c=o(o,3)
6990 IF ASC(n$(a9,4))=o THEN RETURN
7000 FOR k=3 TO 2 STEP-1
7010 IF s(k)>c THEN s1=k
7020 NEXT
7030 IF s1=0 THEN GOTO 7050
7040 f$(2,a9)=LEFT$(f$(2,a9),1)+CHR$(10)+CHR$(slay1+1)+CHR$(c)+MID$(f$(2,a9),5)
7050 IF s(k)>c THEN GOTO 7100
7060 IF schwa9 THEN schwa9=f$(2,a9)=LEFT$(f$(2,a9),1)+CHR$(10)+CHR$(11)+MID$(f$(2,a9),3):GOTO 7080
7070 f$(2,a9)=LEFT$(f$(2,a9),2)+CHR$(11)+MID$(f$(2,a9),3))
7080 f$(2,a9)=LEFT$(f$(2,a9),2)+CHR$(1)+CHR$(c)+MID$(f$(2,a9),5)
7090 RETURN
7100 IF btoloc>c OR btoa9<>0 THEN GOTO 7130
7110 f$(2,a9)=LEFT$(f$(2,a9),1)+CHR$(10)+CHR$(c)+CHR$(c)+MID$(f$(2,a9),5)
7120 btoa9=9
7130 IF bcloc>c OR bcon=1 THEN RETURN
7140 bca9=o:f$(2,a9)=LEFT$(f$(2,a9),1)+CHR$(10)+MID$(f$(2,a9),3):
GOTO 7160
7150 f$(2,a9)=LEFT$(f$(2,a9),2)+CHR$(11)+MID$(f$(2,a9),3))
7160 f$(2,a9)=LEFT$(f$(2,a9),2)+CHR$(3)+CHR$(c)+MID$(f$(2,a9),5)
7170 RETURN
7180 ' *****************
7190 REM ** Steal Object **
7200 ' *****************
7210 tol=o(o,2):ob=o(o,3):a9=o(o,4):IF a9>tol THEN RETURN
7220 GOSUB 5760
7230 IF ASC(MID$(f$(2,tol),1),1))<13 THEN RETURN
7240 f$(1,a9)=LEFT$(f$(1,a9),14)+CHR$(15)+MID$(f$(2,a9),3)
7250 RETURN
7260 ' *****************
7270 REM ** Kill Agent **
7280 ' *****************
7290 a9=o(o,2):tol=o(o,3)
7300 IF a9>=tol THEN RETURN
7310 IF ASC(n$(a9,4))=o OR ASC(n$(tol,4))>=o THEN RETURN
7320 c=ASC(n$(a9,1))
7330 IF ASC(n$(tol,1))>c THEN RETURN
7340 n$(tol,a9)=CHR$(o)
7350 IF bta9=tol THEN bta9=0
7360 IF bca9=tol THEN bca9=0
7370 IF schwa9=tol THEN schwa9=0
7380 LOCATE#1,2,9:PRINT#1,n$(tol)," is e
liminated"
7390 y=y+1
7400 RETURN
7410 ' *****************
7420 REM ** Switch Beacon **
7430 ' *****************
7440 a9=o(o,2): on1=o(o,3)
7450 IF ASC(n$(a9,4))=o THEN RETURN
7460 IF a9<on1 THEN RETURN
7470 IF bca9>a9 THEN ob=3:GOTO 6900
7480 bcon=on1
7490 RETURN
```

```
7500 REM ** Change Status **
7510 ' *****************
7520 a9=o(o,2):p1=o(o,3)
7530 IF ASC(n$(a9,4))=o THEN RETURN
7540 orank=ASC(n$(a9,p1+1))
7550 erank=ASC(n$(a9,4-p1))
7560 IF erank>orank THEN RETURN
7570 a9=o(o,4):a9=CHR$(o(o,3))
7580 RETURN
7590 ' *****************
7600 REM **Hard Copy to Printer **
7610 ' *****************
7620 PRINT#8,CHR$(13):a%=0
7630 FOR k2=5 TO 19
7640 FOR k1=1 TO 36
7650 LOCATE k1,k2
7660 CALL copychar,a%
7670 PRINT#8,CHR$(a%);
7680 NEXT
7690 NEXT
7700 PRINT#8
7710 RETURN
7720 ' *****************
7730 REM ** Error Trapping **
7740 ' *****************
7750 LOCATE 1,24:PRINT"Error",ERR,"in LI
NE",ERL
7760 END
7770 ' *****************
7780 REM ** Z$(array) DATA **
7790 ' *****************
7800 RESTORE 7810:FOR k=1 TO 26:READ z$(
k):NEXT:RETURN
7810 DATA "03222232323444213111332322"
7820 DATA "30124322211211234332314223"
7830 DATA "21023323212234243213141323"
7840 DATA "22202212221123322211313322"
7850 DATA "24320223233343411122131321"
7860 DATA "23322011322434431241343"
7870 DATA "22211210131233232311324223"
7880 DATA "32321104242243233342234"
7890 DATA "22222334032233113221213211"
7900 DATA "31113212302224322423131144"
7910 DATA "31223211310142212213413122"
7920 DATA "42333322222101133342424312"
7930 DATA "41234343322211104344343232"
7940 DATA "41234231322311110443233422"
7950 DATA "22313233444144343324223"
7960 DATA "22124341123323340212122221"
7970 DATA "13221223333340201211222221"
7980 DATA "34431233344444221123240032"
7990 DATA "13311112223431201223313422"
8000 DATA "13212232233431201011321223"
8010 DATA "12112323132331132103231322"
8020 DATA "33331334422332320234123411"
8030 DATA "24421123323444421123240332"
8040 DATA "22113232132312310330331033"
8050 DATA "32232433134222321322123301"
8060 DATA "23331334143322321232122310"
8070 ' *****************
8080 REM ** Screen Copy Machine Code **
8090 ' *****************
8100 RESTORE 8160
8110 MEMORY HIMEM-12
8120 copychar=HIMEM+1
8130 FOR address=copychar TO copychar+10
8140 READ byte:POKE address,byte
8150 NEXT
8160 DATA &dd,&6d,&60,&bb,&dd,&6e,&00,&dd,&6
6,&01,&77,&c9
8170 RETURN
```

13

EGGS · EGGS

● BBC B or ELECTRON

Take control of the madcap Farmer Giles and make sure he doesn't end up with egg on his face.

Collecting his hens' freshly laid eggs is no easy task. If he is not alert the eggs end up smashed on the floor, making a meal for the farm pig.

Points are scored for every egg caught — and one lost for every egg dropped.

Oh yes, watch out for the rotten eggs. Don't let them hit you.

Control keys are Z — left, X — right and Return — jump.

Paul Dyer

```
>LIST
   10 MODE 4
   20 MODE 6
   30 PROCsprite
   40 MODE 5
   50 VDU 23,1,0;0;0;0;
   60 PROCcols
   70 COLOUR 128
   80 CLS
   90 VDU 23,1,0;0;0;0;
  100 ENVELOPE 1,2,2,-2,1,40,20,20,0,0,
0,0,0,0
  110 ENVELOPE 9,1,100,10,-110,10,100,1
10,0,0,0,0,0,0
  120 ENVELOPE 3,5,-4,0,0,50,0,0,0,0,0,
0,0,0
  130 VDU 31;1;R(H);1;
  140 FOR N%=1 TO 9:READ V$:V$=(6-N%)*8:V$V$
  150 *FARMER GILES
  160 ENVELOPE 8 GOSUB 5920
  170 VDU 23,1,0;0;0;0;
  180 A%=INKEY(-82):B%=INKEY(-98)
  190 DEFPROCsetup:VDU1;TEC=0;TEO=0;EGG=0
  200 X%=0:TIME=60
  210 T%=0
  220 X%=X%+1:IF X%=20 AND (ROS=1)=A THEN
RE=1:COLOUR 3:PRINT TAB(ROG;1,27)" "
  230 IF ROS=1 IF J=2 AND ROG=3 AND ROG=1 THEN
RE=1:COLOUR 3:PRINT TAB(ROG,1,27)" "T
IME%
  240 IF RO=1:IF J=2 AND ROG=3 THEN A$
 (C=4) THEN N$:PROCbong:ST=0
  250 IF RO=1:IF J=2 AND ROG=3 THEN A$
 (C=4) THEN N$:PROCbong:ST=0
  260 IF RO=1:IF ROS=1 AND A$="?" THEN A
$ (C=4):98:T THEN Y%=1:PROCbong
  270 IF A%=INKEY(-67) THEN Y%=1:T IME=A
  280 IF J=2:IF INKEY(-74)=50 THEN Y%=1
  290 IF J=2:IF J=2:IF INKEY(-74) THEN
PROCjump:J=1:PROCjump
  300 IF J=2:IF (A1>PIA AND A1<PIA+2) THEN
PROCjump:J=1
  310 IF (A1>PIA AND A1<PIA+2):RE=1:PR
OCbong
  320 IF RE=1 IF INKEY(-74):PROCbong
  330 IF TIME=6000 THEN PROCcalm
  340 SOUND &13,1,0,0,2:MOVE 762-(T
1/2),300:DRAW 762-(T1/2),340
  350 IF J=2:IF (A1>PIA AND A1<PIA) 300-(TIME
-20)/50 THEN SOUND 1,3,230,8
  360 IF J=2:IF INKEY(-74):PROCjump
  400 IF RE=1:COLOUR 3:PRINT TAB(1,RD
-1,ED-2)" "
  810 IF ED=EG%=ROG=ROG1;1;ED3 THEN
T+TIME=0:PROCpig:PROCpig
  820 IF ED=ROG=RND(4);IF EGG=3 THEN A
$:ED=8:SOUND 0,3,120,2:PRINT TAB(1,RD
-1,ED-2)" "
  830 COLOUR 3:PRINT TAB(A$="!";IF (A<C+1)
+C THEN B$:SOUND 0,1,100,3:PRINT TAB(1,
ED+1)" ":PROCfar:TIME=T
  440 IF (A$=1 AND (A$="!");IF (A<C+4)
THEN EGG=1:EGG:PRINT TAB(1,RD-2)(ED
+1)" ":PROCfar:TIME=T
  450 COLOUR 3:PRINT TAB(1,LEN (STR$
$));1;EGG
  460 IF RO%=1:REG=ROG(6);IF
  470 IF RO%=1:REG=1:ROG=1
  480 IF RO%=1:ROG=1:ROG=ROG1
  500 IF RO%=1 THEN PRINT TAB(ROG,27)"
":ROG=ROG+1:IF RO$=1 THEN A$ THEN A
  520 IF RO%=1:IF J=2 AND ROG=4 THEN RE
=1:COLOUR 3:PRINT TAB(ROG,1,27)" "
  530 COLOUR 1:PRINT TAB(A1,27)CHR$(A
+C)
  540 COLOUR 1:PRINT TAB(A1>PIA AND A1<PIA
CIchr$(A1+C)
  550 IF INKEY(-56) THEN X%=TIME:REPEAT:
PRINT TAB(1,7)"PAUSED":UNTIL INKEY(-56)
:TIME=T:REPEAT TAB(1,7)
  560 *FX210,1
  570 IF INKEY(-82) THEN PROC TAB(0,7)
  580 IF PO%=1:IF PO%=1:IF PO=1:IF PO=1
Ocalm
  590 IF PO=1 AND B%="r" THEN T:IME=T:
T+TIME:PROChen(800);1;800 THEN
Ocalm
  600 COLOUR 3
  610 PROChen:IF RO%=1 THEN GOTO 230
  640 END
  650 DEFPROCcols
  700 VDU 5000,0;3;0;0;MOVE
  710 FOR L%=1 TO 0:0 STEP 4
  720 VDU 5000,0;3;0;0;56,60,28
,3:MOVE &60,1;450;1;955:1;955:MOVE CHR$&12
,0:VDU 335-(L%*8),2;1;950+L%*8):PRINT
CHR$128
  730 NEXT
  740 VDU 5000,0;3;0;0;28,144,278,
248,240
  750 ENDPROC
  760 DEFPROCfar
  770 COLOUR 3:PRINT TAB(1,7)"HEN"
 VDU 19,3,7;0;VGO 4
  800 COLOUR 3:PRINT TAB(1,LEN
 (STR$$))1;800;PRINT TAB(1,RD-7)"DROPPED"
 :PRINT TAB(1,RD-LEN (BOG))1;800):TAB(1,
  EN (STR$$));1;ROG):PRINT TAB(1,0)
 :PRINT TAB(1,LEN (STR$$))1;"DROPPED"
 0000";TAB(1,5):LEN (STR$$ GCT);1;SCT)"
 TEP 2:VDU 8000,1,4,MA,1;NEXT READ FOR
 STEP 2:VDU 8000,1,4,MA,1;NEXT READ FOR
 NEXT:VDU 20,19,5;120,19,5
  850 COLOUR 1:GOU 1 STEP -1:PRINT TAB
 (13-1,8+(5-L$))CHR$&130:CHR$(128+L$)
 :CHR$128);225:NEXT
  860 VDU 4,19,129,252,251,255,58,39,
25,255
  870 NEXT
  880 VDU 23,128,253,257,52,52,52,52,
255,255
  890 VDU 23,129,170,171,187,255,255,
255,255,255
  891 VDU 23,129,128;129;1;PRINT TAB(8
.89)PRIMON(20,CHR$128)
  900 COLOUR 1
  910 VDU 23,129,COLOUR 8;PRINT TAB(5
,7)"HEN HOUSE";COLOUR 128
  920 VDU 23,128,253,247,52,52,52,52,
247,253
  930 COLOUR 128
  940  COLOUR 1:PRINT TAB(7,8)"
  950 VDU 23,129:COLOUR 2:PRINT TAB(5
,7)"HEN HOUSE";COLOUR 128
  960 COLOUR 128
  970 FOR L$=60 TO 960 STEP -1
  980 SOUND 1,3,L$-450/4,1
  990 FOR L$=570 TO 960 STEP 1:PRINT
TAB(0,3)
 1000 VDU 23,131,COLOUR 6;PRINT TAB(0
,1)"CAUGHT"
 1010 IF L$>570 THEN GCOL 0,3
 1020 MOVE L$,890:DRAW L$,620
 1030 NEXT
 1040 ENDPROC
 1050 DEFPROCegg
 1060 VDU 23,132,170,127,127,127,63,3
 1070 VDU 23,132,170,255,254,255,255,
255,255
 1080 VDU 23,131,1;4,28,28,42,0,0
 1090 VDU 23,131,3,32,128,126,10,56,84,0
 1100 VDU 23,132,128,56,32,16,56,84,0
248,0
 1110 VDU 23,133,0,0,1,57,61,127,12,
129,85,255
 1120 VDU 23,133,0,0,1;57,127,128,60,
126,85,255
 1130 VDU 23,137,255,255,255,255,255,
129,66,255
 1140 VDU 23,136,126,28,28,31,15,7,
32,224,224
 1150 VDU 23,137,255,255,255,255,255,
255,255
 1160 VDU 23,138,126,60,60,24,0,0,
248,248
 1170 VDU 23,138,252,254,252,252,248,
240,0
 1180 VDU 23,139,128,252,126,144,176,
248,248
 1190 VDU 23,139,1;6,28,28,12,144,124,
248,248
 1200 VDU 23,135,10,15,15,7,7,7,7,0
 1210 VDU 23,135,10,50,126,255,159,37,
26,62
 1220 VDU 23,134,50,56,60,60,28,60,60,
28,40,0
 1230 VDU 23,145,50,50,60,60,28,60,60,
28,40,0
 1240 VDU 23,145,50,10,126,135,193,66,
60,126
 1250 DEFPROCarrow
 1260 VDU 23,147,Chrs
 1270 IF RO$=1 THEN CH=2
 1280 IF CH=2 THEN CH=3
 1290 IF CH=3 THEN CH=4
 1300 IF CH=4 THEN CH=1
 1310 PRINT TAB(1,ROG):PROCchr:PROC
 1320 ENDPROC
 1330 COLOUR 3
 1340 PRINT TAB(16,1)CHR$128;CHR$131
 (CHR$&131)
 1340 PRINT TAB(16,1)CHR$128;CHR$131
 :CHR$&131" ":CHR
```

```
#132
1410   COLOUR 3
1420   PRINT TAB(16,15)CHR$128;CHR$134
1430
1440   PRINT TAB(16,16)CHR$137
1450   PRINT TAB(16,16)CHR$133;CHR$134
1460   PRINT TAB(16,16)CHR$133;CHR$137
1470 CHR$130:MOVE 1088,520:PRINT CHR$
132
1480   VDU 5:COLOUR 0,1:MOVE 68,554:PRI
NT CHR$140:MOVE 1088,554:PRINT VDU 0:VD
U 4
1490   ENDPROC
1500   DEFPROCeat
1510   COLOUR 2
1520   PRINT TAB(16,17)CHR$128;CHR$137
132
1530   PRINT TAB(16,17)CHR$131;" "CHR
132
1540   PRINT TAB(16,18)CHR$131;" "CHR
CHR$130
1550   COLOUR 3
1560   PRINT TAB(12,18)CHR$136;CHR$137
1570 CHR$130
1580   PRINT TAB(12,15)CHR$136;CHR$137
CHR$130:MOVE 520:PRI
1590   VDU 5:COL 0,2:MOVE 68,554:PRI
NT CHR$136:MOVE 1088,554:PRINT VDU 0:VD
U 4
1600   ENDPROC
1610   DEFPROCnch
1620   COLOUR 2
1630   PRINT TAB(16,17)CHR$128;CHR$137
132
1640   PRINT TAB(16,18)CHR$131;" "CHR
CHR$130
1650   COLOUR 3
1700   PRINT TAB(16,18)CHR$136;CHR$137
CHR$135
1710   VDU 5:COL 0,2:MOVE 520:PRI
1720   VDU 5:COL 0,1:MOVE 580:554:PRI
CHR$139:VDU 4
1730   ENDPROC
1740   DEFPROClay
1750   IF LA=1 THEN C=0
1760   IF LA=1 THEN C=2
1770   IF LA=2 THEN C=1
1780   IF LA=3 THEN C=2
1800   IF LA=4 THEN C=0
1810   PRINT TAB(15)CHR$141;TAB(C)
CHR$148A162
1820   PRINT TAB(16)CHR$141;TAB(C+2)
CHR$148A162
1850   RE=1:SOUND 1,1,90,2:SOUND 1,
2,30,1:SOUND 1,3,60,1:SOUND 1,1,90
D 1,3,30,1
1880   RE=1:SOUND 1,1,90,2:SOUND 1,
2,30,1:SOUND 1,3,60,1:SOUND 1,1,90
D 1,3,30,1
1900   PRINT TAB(16)CHR$136;TAB(C+2)
CHR$148A162B
1910   VDU 23,147,240,255,189,149,16A
1920   VDU 23,148,15,15,10,0,3,9
1930   VDU 23,147,224,248,255,189,169
1940   VDU 23,148,0,0,0,0,0,240,248
40,202,202
1960   VDU 23,150,0,0,0,0,0,0
1970   ENDPROClay
1980   COLOUR 1
1990   DEFPROCafr
2000   VDU 5:MOVE ((A1*2)*32)-6,(1-2
(-UP*32)-3):COL 0,P:PRINT CHR$153:VDU 4
2010   VDU 5:MOVE ((A2*2)*32)-6,(1-2
(-UP*32)-3):COL 0,P:PRINT CHR$153:VDU 4
2030   PRINT TAB(A,UP)CHR$160,2-1
2040   VDU 5:MOVE ((A2*2)*32)-16,(1-2
(-UP*32)-3):COL 0,P:PRINT CHR$153:VDU 4
2050   VDU 5:MOVE ((A*2)*32)-16,(1-2
(-UP*32)-3):COL 0,P:PRINT CHR$153:VDU 4
2060   ENDPROC
```

```
" "TAB(A,UP-2)
2090   VDU A=B-2:VDU 23,151,224,
283,255,247,57,195,283:VDU 23,151,224
224,224,224,64,192,224,224
2100   IF A=0 THEN AA=1
2110   IF A=8 THEN AA=1
2120   ENDPROC
2130   DEFPROCfrog
2140   IF A=1 PROCa=A$="y"
2150   IF A=8 PROCa=A$="y"
2170   VDU 23,148,15,31,255,169,9,15,1
92,0
2180   VDU 23,147,0,128,240,80,0,192,1
92,0
2200   VDU 23,151,0,0,0,0,0,192,224
2210   VDU 23,152,2,3,0,0,0,0,0
2270 -UP*32)-3):COL 0,P:PRINT CHR$152:VDU 4
2280   VDU 5:MOVE ((A2*2)*32)-6,(1-2
-UP*32)-3):COL 0,P:PRINT CHR$152:VDU 4
2290   PRINT TAB(A,UP-2)CHR$150
2310   VDU 5:MOVE ((A*2)*32)-6,(1-2
-UP*32)-3):COL 0,P:PRINT CHR$152:VDU 4
2320   ENDPROC
2330   PRINT TAB(A,UP-1)
" "TAB(A,UP+1)
2350   IF A=B-2 VDU 23,150,7,19
2360   IF A=B+2 VDU 23,150,7,7,3,3,7
7,7,3,7,7
2370   IF A8="1" PROCfrog
2380   ENDPROC
2390   DEFPROCnth
2400   IF MO>2 PROC
2410   IF MO>3 PROC
2420   IF MO>3 PROC
2440   A=1:B=8:HI=10
2450   A8="1":LA=1
2460   EGG=0
2470   TEC=0:SCT=0
2490   BI=0:BO=0:S0=0:S4=0:S3=0
2500   PIA=19:DT=0:W=0:S3=0
2510   P3=0:P4=1:P5=1:PIA=19
2530   IF CH<1 THEN LA=1
2540   ENDPROC
2560   IF CH<1 THEN LA=1
2570   IF CH<1 THEN LA=2
2580   IF CH<1 THEN LA=2
2590   ENDPROC
2600   IF CH<1 THEN LA=2
2610   IF CH<1 THEN LA=2
2620   IF CH<1 THEN LA=2
2630   ENDPROC
2640   IF CH<1 THEN LA=2
2650   RE=2:PROChene RE=2:PROC
2660   RO=RO+1
2670   IF EGG=EGG THEN RE=2:PROC
2870   IF MO>1 RO=0
2880   RO=RO+1
2890   ENDPROC
2910   IF A>8 PROChene
Flag:LA=1:RO=1:PROC
2920   IF A>1 PROCa:LA=1:PR
OCflag:RO=1
2930   ENDPROC
3000   DEFPROChene
Flag:LA=1:RO=1:PROC
3010   IF J>1 THEN UP=UP-2
3020   IF J<1 THEN UP=UP+2
```

```
3020   VDU 23,151,224,224,224,224,64,1
92,224,224
3030   PROCleg:PROCalf
3040   TIME=0
3050   IF BO>1 AND BO<8 THEN RT=MO/6
3060   ENDPROC
3070   DEFPROCnath
3080
3090   MOVE ((C1*2)*32),98:GCOL 0,3:P
((C1*2)*32+32)-40,98:DRAW ((C1*2)*32)
2)+32,106:DRAW (((C1*2)*32)-40,106:DRAW
3100   SOUND 0,2,10,3
3110   MOVE 0,2,10,3
3130   MOVE 0,2,10,3
3140   VDU 28,0,30,19,5:CLS:VDU 26
3150   TEC=TEC-EGG:TEC=TEC-EGG
3160   COLOUR 3:PRINT TAB(1,2)"THEM HOU
SE OUT"TAB(15,18)THEM"ST=MO/30,7(30)COLOUR
1:PRINT TAB(8,9)TOTAL EGGS"";COLOUR 3
:PRINT TAB(8,11)TEC NEW FEA M
EN CRT8 TEC(1,5)TEC(1,8)PRINT TAB(8,9)
000"TAB(8,LEN (STR$ (TEC)),5)CRT5
00000"TAB(8,LEN (STR$ TEC),5)SCT7
GAME?
3280   IF A=1 THEN PROCmem
3290   IF A=0 THEN PROC
3300   IF A$="N" THEN PROCnew
3310   PRINT TAB(6,5)"END OF
GAME"
3320   IF B=0 THEN PROC
3330   UP=UP-2
3340   SOUND 1,8,130,5
3350   IF (EG=1) AND (A$="1") IF (A<C
) AND (B<EGG=EGG) IF (A<C) SOUND 1
,3,120,2:BO=0:PRINT CHR$11:" "PRINT
CFalf
3370   IF (EG=1) AND (A$="1") IF (A<C
) AND (EG=1) AND (A$="1") SOUND 1,3
,120,2:BO=0:PRINT CHR$11:" "PRINT
CFalf
3360   IF (EG=1) AND (A$="1") IF (A<C
) AND (EG=1) IF (A>C) SOUND 1,3
art
3360   PRINT TAB(9-LEN (STR$(EGG),1),5)
3390   IF A$="Y" THEN PROCalf ELSE PR
OCarst
3400   T=TIME
3410   PRINT TAB(A,UP)"  "TAB(A,UP+1)
"  "TAB(A,UP-2)
3420   IF A$="1" THEN PROCfrog
3430   PRINT TAB(A,UP)"  "TAB(A,UP+1)
"  "TAB(A,UP-2)
3440   SOUND 1,5,150,5
3460   IF A$="Y" THEN PROCalf ELSE PR
OCfarst
3480   ENDPROC
3490   PRINT TAB(8,21)"YOU WERE HIT BY
A"
3500   ENDPROC
3510   PRINT TAB(9,21)"THE ROTTEN EGG!
!"
3520   ENDPROCmat
3530   PRINT TAB(8,21)"YOU FAILED TO C
3540   ENDPROC
3550   PRINT TAB(3,25)"AS MANY EGGS AS
3560   ENDPROC
3570   PRINT TAB(1,21)"YOU DROPPED!!"
3580   ENDPROC
3590   PRINT TAB(1,21)"YOU HAVE BEEN H
IT"
3600   PRINT TAB(8,21)"ON THE HEAD BY
AN"
3610   PRINT TAB(7,25)"EGG!!"
3620   ENDPROC
3630   PRINT TAB(1,21)"YOU"
3640   IF A=0 AND C-2 THEN S1=1
3650   IF A=0 AND C-2 THEN S1=1
3660   IF A=0 AND C-2 THEN S2=1
3670   IF A=0 AND C-2 THEN S3=1
3680   IF A=0 AND C-2 THEN S3=1
3700   PRINT TAB(1,21)"YOU SLIPPED ON
3710   ENDPROC
3720   PRINT TAB(8,21)"THE EGG YOLK!!!"
3730   ENDPROC
3790   IF A$="" THEN PROCalf ELSE PR
3790   IF A=0 THEN PROCalf ELSE PROCnd
```

```
3800 IF A=SZ THEN RE=4:PROCend
3810 IF A+1=SZ THEN RE=4:PROCend
3820 IF A+2=SZ THEN RE=4:PROCend
3830 IF A+3=SZ THEN RE=4:PROCend
3840 IF A+4=SZ THEN RE=4:PROCend
3850 IF A+5=SZ THEN RE=4:PROCend
3860 IF A+1=15 THEN RE=4:PROCend
3870 IF A+2=15 THEN RE=4:PROCend
3880 IF A+3=15 THEN RE=4:PROCend
3890 IF A+4=15 THEN RE=4:PROCend
3900 IF A+5=15 THEN RE=4:PROCend
3910 ENDPROC
3920 DEFPROCst
3930 VDU 23,156,0,0,0,0,3,3,15
3940 VDU 23,156,0,0,0,3,15,159,255,2
40
3950 VDU 23,156,57,249,255,255,30,0,
3,1
3960 VDU 23,156,57,249,255,255,255,207,
192,128,128
3970 VDU 23,158,240,240,200,224,226,
192,192,192
4000 ENDPROC
4010 DEFPROCself
4020 IF PP=1 THEN PP=0:VDU 23,156,57,
249,255,255,30,0,1,1:VDU 23,157,255,255
255,255,207,192,97,97:VDU 23,158,240,
240,200,224,226,192,192,192:ENDPROC
4030 IF PP=0 THEN PP=1:VDU 23,156,57,
249,255,255,30,0,0,1:VDU 23,157,255,207,
192,192,128:VDU 23,158,240,240,200,224,
226,192,192,192
4040 VDU 23,157,128 PRINT TAB(18,27
)"TAB(1,28)"
4050 COLOUR 1
4060 IF PIA<13 THEN PRINT TAB B&="2":PO=2:PRO
C org:ENDPROC
4070 IF A="L" THEN PROCalf
4080 IF A="R" THEN PROCright
4090 IF PIA<16 THEN VDU 5:MOVE ((PIA
+2)*32+92)*32-38,(3*82-24)*28:GCOL 0,3:PRINT
CHR$180:VDU 6
4100 IF PIA<16 THEN PIA=PIA-1:PRINT
TAB(PIA,27)CHR$156:PRINT TAB(PIA,27)CHR$
160:ENDPROC
4110 IF PIA<16 THEN VDU 5:MOVE TAB(PIA,
27)CHR$156 TAB(PIA,27)CHR$160 TAB(PIA,27)CHR$157
4120 IF PIA<16 THEN PRINT TAB(PIA+1,2
8):CHR$160:CHR$160 TAB(PIA,28)CHR$158
4130 IF A="R" THEN VDU 5:MOVE((PIA*2
+2)*32+92)*32-38,(3*82-24)*28:GCOL 0,3:PRINT
CHR$180:VDU 6
4140 IF A="R" THEN PIA=PIA+1:PRINT TA
B(PIA,27)CHR$156:PRINT TAB(PIA,27)CHR$156
4150 IF A="R" AND PIA=16 THEN PRINT
TAB(PIA,27)CHR$156 TAB(PIA,27)CHR$156
4160 IF A="R" AND 85<0 THEN S5=0
4170 ENDPROC
4180 DEFPROCalf
4190 IF PP=1 THEN PP=0:VDU 23,156,14,
15,31,57,249,255,30,0:VDU 23,157,255,255
255,255,255,255,255,255
4200 IF PP=0 THEN PP=1:VDU 23,156,14,
15,31,57,249,255,30,0:VDU 23,157,255,255
255,255,255,255,255,255
4210 VDU 23,158,156,156,156,255,120,
128,128,128
4300 IF PIA>17 THEN PRINT TAB(PIA,27
)"TAB(PIA,28)"
4310 IF A="R" THEN PRINT TAB(PIA,27
)"TAB(PIA,28)"
4320 IF PIA<16 THEN VDU 5:MOVE ((PI
A+2)*32+92)*32-38,(3*82-24)*28:GCOL 0,3:PRINT
CHR$180:VDU 6
4330 IF A="L" THEN PROCleft
4340 IF A="R" THEN PROCright
4370 IF PP=1 THEN VDU 23,156,0,0,0,0,
15,15,15,15,159,255,159,0,1:VDU 23,15
5,255,255,255,255,255,255,255,255,255
4380 IF PP=0 THEN VDU 23,156,14,15,15,
,15,159,255,159,0,1:VDU 23,157,255,25
5,255,255,255,255,207,192,120,128
4390 VDU 23,157,255,192:PRINT TAB(16,
,15,15,7,3,3,1:VDU 23,157,255,255,
159,255,30,15,15,7:VDU 23,157,255,255,159,
120,128,128:VDU 23,158,240,128,240,255,30
,231,231
4400 COLOUR 1
4410 IF PIA>16 THEN PRINT TAB(PIA,27
)CHR$156 TAB(PIA,28)CHR$156:PRINT TAB(PIA,
28)CHR$160 TAB(PIA+1,27)CHR$156:PRINT TA
B(PIA,28)CHR$157:CHR$157:CHR$158
```

```
4450 IF PIA<16 THEN VDU 5:MOVE (((PI
A+2)*82*3)*32-38,(3*82-24)*28:GCOL 0,3:PRINT
CHR$180:VDU 6
4460 IF PIA<16 THEN S0=0
4470 IF PIA<16 THEN SO=0
4480 IF PIA<16 THEN S0=0
4490 IF PIA<16 THEN S0=0
4500 ENDPROC
4510 DEFPROCend
4520 IF S1>0 THEN S0=20:GOTO 4580
4530 IF S1>0 THEN S2=0
4540 IF S1>0 THEN S2=0
4550 IF S1>0 THEN S2=0:GOTO 4580
4560 IF S1>0 THEN S2=0:GOTO 4580
4570 IF S1>0 THEN S2=0:GOTO 4580
4580 P0=1
4590 PIA(1)PF=1/88+"]"
4600 VDU 28,22,23,15,19
4610 PRINT TAB(0,23)"YOU HAVE BEEN
4620 PRINT TAB(0,23)"BITTEN BY THE P
IG!!"
4630 ENDPROC
4640 DEFPROCend1
4650 PRINT TAB(3,4)"POOR FARMER!!"
4660 FOR R=0 TO 5:SOUND 1,RND(3)+2,2
40,5:PRINT TAB(M%(1):M%(1))THEN TAB(3,3
)CHR$(1):B(4):NEXT
4670 COLOUR 1
4680 PRINT VDU 19,2,5,0:PRINT TA
B(1,2)"RESCUE FOR INFO OR"COLOUR 2:PRINT
TAB(1,8)"ANY KEY TO START"
4690 REPEAT UNTIL INKEY-99
4700 VDU 26,30,19,4:CLS:VDU 26
4710 ENDPROC
4720 DEFPROCcn
4730 VDU 26,30,19,19:CLS:VDU 26
4740 IF RCT%M(1) THEN GOTO 4810 ELS
E K=K+17:P=K+RND(6):NEXT
4750 ENDPROC
4760 DEFPROCcn11
4770 IF R=0 THEN PROCcn11
4780 IF R=1 THEN PROCcn12
4790 IF R=2 THEN PROCcn13
4800 IF R=3 THEN PROCcn14
4810 DEFPROCcn11
4900 H(6)=H(6)
4910 H(1)=H(1)
4920 H(2)=H(2)
4930 H(3)=H(3)
4940 H(4)=H(4)
4950 H(5)=H(5)
4960 COLOUR 1
4970 PRINT TAB(3,21)"YOUR SCORE WAS"
4980 PROCjobs
4990 H(8(1)=H(8
5000 ENDPROC
5010 DEFPROCcn13
5020 H(1)=H(1)
5030 H(2)=H(2)
5040 H(3)=H(3)
5050 H(4)=H(4)
5060 COLOUR 1
5070 PRINT TAB(3,21)"YOUR SCORE WAS"
TWO"
5080 PROCjobs
5090 H(8(1)=H(8
5100 ENDPROC
5110 DEFPROCcn14
5120 H(1)=H(1)
5130 H(2)=H(2)
5140 H(3)=H(3)
5150 H(4)=H(4)
5160 COLOUR 1
5170 PRINT TAB(3,21)"YOUR SCORE WAS"
THREE"
5180 PROCjobs
5200 H(6)=H(6):H=H
5300 H(8)=H(8
5400 H(4)=H(4):H=H
```

```
5420 ENDPROC
5430 DEFPROC616
5460 COLOUR 1
5470 PRINT TAB(3,21)"YOUR SCORE WAS"
IVE"
5480 PROCjobs
5490 H(8(1)=H(8
5500 ENDPROC
5510 DEFPROC616
5520 COLOUR 1
5530 PRINT TAB(3,21)"RANKED NUMBER F
IVE"
5540 PROCjobs
5550 H(8(1)=H(8
5560 ENDPROC
5570 COLOUR 3
5580 PRINT TAB(1,25)"TYPE IN YOUR NA
ME!"
5590 COLOUR 3
5600 PRINT TAB(4,29)".........."
5610 *FX 15
5620 H$=""
5630 S=1,RND(255),1
5640 COLOUR RND(3)
5650 IF CHR$=1 AND A<127 THEN CHR$=CHR
=1:PRINT TAB(3:CHR,29)" ":H$=MID$(H$,
0,(LEN H$)-1):GOTO 5650
5660 IF H<13 THEN VDU 4,30,19,3:C
OLOUR 1:PRINT TAB(4,29)H$:ENDPROC
5670 IF CHR$12 THEN PRINT TAB(4,CHR,
II,(8+1) OR (8+27)
5680 SOUND 1,3,RND(255),1
5700 IF H<5 THEN REPEAT:B=GET:UNT
IL (8+1) OR (8+27)
5710 SOUND 1,3,RND(255),1
5720 IF H<5 THEN CHR=CHR-1,PRINT TA
B(3:CHR,29)" ":H$=MID$(H$,0,(LEN H$)-
5730 IF B>127 AND B<127 THEN 5650
5740 GOTO 5650
5750 DEFPROC617
5760 PRINT TAB(1,25)"PRESS ANY Key Q
w"
```

```
5790 DEFPROC18
5800 PRINT "To warn you of an egg
is about to ...
5810 PRINT "...
5850 AN=INKEY(200)
5860 AN=INKEY(200)
5870 PRINT "...Press ANY key
to move on..."
5900 IF GET ENDPROC
5910 REM ERROR PROCEDURE
5950 MODE 6:VDU 3,1,0;0;0;0;:PROCtt
5960 VDU 3
5970 MODE 6
5980 PRINT "REPORT:PRINT " at line
";ERL
5990 VDU 23,1,0;0;0;0;
6000 END
```

● Spectrum 16K

```
1 REM 1985 Mark Tuck
4 REM (inv vid)variables(true vid)
5 GO SUB 9000: DIM h(3): DIM h$(4,8): LET h=180: LET h(1)=60: LET h(2)=40: LET
 h(3)=20: LET h(4)=0: LET h$(2)="mark": LET h$(3)="mark"
 6 LET a$="mark"
10 LET t=0: LET c=0: LET e=0
20 BORDER 7: INK 0: PAPER 7: CLS : LET f=0
25 LET x=0: LET y=0
30 REM (inv vid)set up route(true vid) PRINT AT 0,13;h$(c): secs by "jh$(c)
40 LET e=(c+1): LET e=c: PRINT AT 9,9; INK 3;"£";AT 9,x; INK 0; PAPER 5: ST
 LET a=INKEY$: IF a$="mark" THEN PRINT AT e,a; INK 3;"£";AT e,x; INK 0; PAP
 ER 5: ST
 INK 3;"£";AT x,y
 45 LET e=t: LET t=e+1: LET f=e+1: PRINT AT 10,x;"£";AT 11,x;"£": PAUSE 0
 49 REM (inv vid)main loop(true vid)
 50 IF INKEY$="m" THEN LET x=INT(x-1): LET t=t-1: LET t=t-2: GO TO 70
 60 IF INKEY$="n" THEN LET x=INT(x+1): LET t=t-2: GO TO 70
 65 LET t=t+2
 70 LET c=INT(RND*2): LET d=INT(RND*3)
 75 LET a=a-1: PAUSE a(1)+(1=40 and a(2))
 80 LET b=b-1+(and b(1)+(b=40 and b(2))
 85 IF ATTR (12,x)<56 OR ATTR (13,x)<56 THEN GO TO 200
 90 PRINT AT 10,x;"£";AT 11,x;"£"
 100 LET a$="mark"
 101 IF a>10 AND f=0 THEN LET PRINT AT 21,a; INK 3;"£";AT 21,x+1; PAPER 5
 1 INK 0;"£"; FINISH";TAB a=y; PAPER 7; INK 3;"£"; GO TO 130
 105 IF a=30 THEN LET PRINT AT 21,a=y;"£"; LET po=a=INT (a/2)+INT (RND*5)-2
 107 LET r=n000010: IF a>0 AND a<30 THEN PRINT INK 2;"£"; PAPER 7; INK 3;"£";  GO TO 130
 110 IF a=2 THEN PRINT INK 2;AT 21,po;"£"
 115 IF a=3 THEN PRINT INK 1;AT 21,po;"£"
 120 IF a=4 THEN PRINT INK 2;AT 21,po;"£"
 125 IF a=5 THEN PRINT INK 3;AT 20,po;"£";AT 21,po;"£"
 130 LET f=f+3
 180 LET atr=a+1
 199 REM (inv vid)hit(true vid)
 200 IF ATTR (12,x)=56 THEN PRINT AT 10,x;"£";AT 11,x;"£";AT 12,x
 : GO TO 300
 205 IF ATTR (12,x)=58 THEN BEEP .05,10: PRINT AT 12,x;"£ ": LET t=t-(10+INT (RN
 D*10): GO TO 85
 210 IF ATTR (11,x)=58 THEN PRINT AT 11,x;"£"
 215 PRINT AT 11,x;"£";AT 12,x;"£"
 220 PRINT AT 21,x;"£";AT 21,x;"£"
 225 FOR r=50 TO 1 STEP -1: BEEP .01,r: NEXT f
 230 PRINT AT 12,x;"£";AT 11,x;"£"
 235 LET ta=ta=e: FOR r=0 TO 500: NEXT f
 240 IF c=13 THEN LET c=0: GO TO 25
 245 GO TO 4000
 299 REM (inv vid)end course vid)
 301 LET ta=ta: LET t=t+t: PRINT AT r,e; PRINT .02,t: NEXT f: NEXT a
 305 LET ta=ta+: LET t=t+t: PRINT AT r,e; PRINT AT r; TIME; "£";t;" seconds "
 310 FOR r=0 TO 500: NEXT f
 3000 FOR r= BORDER 0: GO SUB 1: INK 7
 3005 PRINT AT 5,5; INK 4;"Your time was "t;" seconds"
 3010 IF t<his(c) THEN LET his(c)=t: PRINT AT 8,3; INK 5;"YOU'VE DONE OVER 1r "
 3020 FOR r=0 TO 500: NEXT f
 3025 PRINT AT 10,0; INK 6;"ENTER name (maximum 6 letters: ": INPUT h$(c)
 3030 IF LEN h$(c) THEN LET h$(c)=h$(c)
 3035 PRINT AT 10,0; INK 6;"Course record is "jh(c);" seconds"jAT 15,12;"by "jh$
 (c)
 3025 FOR r=0 TO 31 STEP 2: PRINT AT 18,r; INK 6"£": NEXT b
 3030 PRINT AT 21,0; PAPER 0; INK 6;"PRESS ANY KEY FOR NEXT COURSE ": PAUSE 0
 3035 IF c=3 THEN GO TO 4000
 3040 GO TO 240
 4000 REM (inv vid)new end (true vid)
 4090 REM (inv vid)tune(true vid)
 5000 BORDER 0: PAPER 0: INK 5: CLS : PRINT AT 1,9; FLASH 1;"CONGRATULATIONS": FL
 FL
 5010 PRINT AT 3,16; INK 4;"WELL DONE !!"
 5020 PRINT AT 4,15;"jh$(h$(1);"AT 5,14;"jinv vidjan3an3an3an3an3(true vid)"
 5030 PRINT AT 5,14; OVER 1;"£";AT 6,13;"jh$(h$(2);" AT
 AT 7,15;"hn7jin3hn3h3h3"jen3"jAT 8,13;"jen3hn3hn3"jAT 9,13; PAPER 0;"£"
 10,15;"jan3 AT 11,16;"jAT 12,14;"jhn3an3an3an3"jAT 13,16;"jen3hn3"jAT
 5035 PRINT AT 14,0; INK 4;"You've completed all 3 ski runs,"AT 16,0;"in a total
 time of "jTIME"t seconds."
 5025 BORDER 50; PAPER 0: INK 5: PAPER 4: BEEP #/10,8: NEXT r
 5030 DATA 5,3,2,5,3,5,7,5,8,5,5,0,5,8,5,3,5,5,5,
 5040 DATA 5,3,4,3,5,3,5,7,5,1,5,7,4,5,3,5,3,4,3,2,4,4,5,10
 5035 IF t<=m THEN GO TO 5000
 5045 PRINT AT 21,0; PAPER 0; INK 6;"PRESS ANY KEY FOR THE MASTER ":
 5050 PRINT AT 21,0; PAPER 1; INK 6;"ENTER name (maximum 6 letters): INPUT m$;
 5060 PRINT AT 21,0; PAPER 1; INK 6;"SAVE FOR HIGH SCORES ": PAUSE 0
 5999 REM (inv vid)save table(true vid)
 6000 BORDER 0: CLS : PRINT AT 1,3;"Your ski rating is "; BRIGHT 1; INT (tam100/3&
 0)1""; BRIGHT over1 4,15; INVERSE RECORD=4 FOR r=1 TO 500: NEXT f
 6005 PRINT AT 14,0; INK 4;"You've completed all 3 ski runs,"AT 16,0;"in a total
 of "jh;" seconds"
 6005 PRINT AT 21,0; PAPER 4;"PRESS ANY KEY FOR ANOTHER RUN ": PAUSE 0: GO TO 5
 ih;" seconds"
 6010 PRINT AT 21,0; PAPER 4;"PRESS ANY KEY FOR ANOTHER RUN ": PAUSE 0: GO TO 5
 9000 REM (inv vid)graphics(true vid)
 9005 FOR b=0 TO 9: FLASH 1;"STOP FOR "n"7; READ n: POKE USR "a"+b,n: NEXT q
 9010 DATA 24,135,68,189,153,153,193,189,36,36,52,20,36,36,54,129
 9015 DATA 36,56,100,16,78,4,4,56,54,66,16,56,64,24,0
 9020 DATA 28,34,65,127,129,129,66,60,62,127,24,20,170,256,20
 9025 DATA 24,24,65,129,129,129,129,66,60,60,127,24,20,170,256,20
 9030 DATA 137,129,133,129,129,129,129,129,189,96,6,173,167,27,37
 9035 DATA 60,152,152,255,0,252,0,56,76,129,68,146,146,144,68,38
 9040 DATA 24,146,18,36,66,127,36,14,144,64,34,145,145,145,145,36
 9100 REM (inv vid)instructions(true vid)
 9105 PRINT AT 3,1;"Ski straight and pick up clocks"AT 5,1;"for a fast time. Wat
 ch out for"jAT 7,3;"trees, rocks and snowmen for"
 9110 PRINT AT 11,3;"Can you complete all three"jAT 13,0;"courses to become the S
 KI MASTER?"jAT 17,0;"Keys are 'M'-ski left 'N'-ski right"
 9115 PRINT AT 20,0; FLASH 1;"PRESS ANY KEY TO BEGIN
 9120 PAUSE 0: RETURN
```

SKI MASTER

As the winter sports season hits its peak, C+VG presents *Ski Master* to improve your skills on the slippery slopes.

Using the M and N keys you must control the skier on his downward path, avoiding flags, trees, rocks and snowmen. The straighter you ski, the faster your time. Collecting the various clocks on the route will also boost your time.

All underlined text represents graphics and so(inv vid) = inverse video, A = user-defined graphic 'a' and sh7 = SHIFT + graphic '7'.

Note line 5015 contains five characters of normal Spectrum underline (SYM SHIFT + '0').

● Mark Tuck

RECCONAISANCE

• QL

Recconaisance is a contrast to the usual shoot-em-up, high speed arcade games. It is a game which requires ingenuity, care and intelligence to successfully complete and can also be extremely addictive.

The basic aim is simple. You are a member of an elite corps whose assignment is to establish the precise location of four high explosive ordnance stores within an enemy camp prior to a bombing raid. You cannot gain admittance to the camp and so can only prowl about the perimeter.

You have divided the enemy camp into an 8 × 8 grid and it is this grid which forms the basis of your strategy. Each side is denoted by a letter, A – D and each grid square by numbers across the bottom and the top.

You cannot see into the camp as your survey will take place at night. The one item of equipment you have with you is a maser rifle which projects a coherent beam of microwave radiation. Around the perimeter of the camp, which is thoughtfully square, you have placed, at equal intervals, small reflective discs which are wired to your maser computer, these discs being identified as numbers on the sides (fig. 1).

The method of determining the precise location of each ordnance dump is as follows: positioning your rifle at the first co-ordinate you fire a shot. The entry position is shown in the window on the left of the screen e.g. A1. This is followed immediately by the exit co-ordinate which is itself determined from the route taken by the maser beam after being fired.

Fig. 2 shows this more clearly. Here it can be seen that an "invisible" ordnance store is centred on 3,4. Because of its size, each "store" overlaps into the surrounding eight squares and firing a beam into any of the eight squares will produce a different exit co-ordinate. The way it works is this:

A beam entering at A2 (top left) hits the store at 2,3, is reflected at right angles to the left and emerges at D3. The display in the left hand window would read 'A2 : D3'.

A shot entering at D5 is reflected to the bottom and would emerge at C2.

Entry at C4 would mean exit at B5 and so on.

However, a direct hit, i.e. entry from A3, B4, C3 or D4 would lead to the message 'absorbed' being displayed.

From this information it can be deduced that a store exists centred on 3,4. Hah! Obvious, you might think. But what if a second store exists with its centre on the next but one square as shown in fig. 3? The 'store' on 5,4 is contiguous with the one on 3,4 therefore reflecting the beam straight back out at A4.

Even more sneaky, if another "store" were positioned at 7,7 then a beam entering at B5 would bounce at right angles downwards where, at 6,6 it would encounter the top left of the third 'store' and be reflected yet again through ninety degrees bringing the beam back to its original path but displaced by one row downward.

For that manoeuvre the display would read: B5 (entry) : D6 (exit).

If a beam were aimed from C6 then, as it encountered an obstruction so close to the point of origin, it would re-emerge at the same point . . .

Since the game uses a total of four "stores", the possible combinations are truly mind boggling. Surprisingly, it's not that difficult when you've become used to it!

For each "shot" your score increases by one and the aim is to complete the game with the fewest possible tries. When you think you've located every single store you press <ESC> and a small prompt appears in the window below the grid asking for, first, the x co-ordinate and them the y co-ordinate of each of the four "stores". If you have it right then congratulations are offered but a wrong guess simply tells you you're wrong but does not specify how! Thus you are left to try and eliminate the possibilities.

The game does not allow you to try the same (or a reverse) co-ordinate twice; therefore a pencil is a very useful adjunct when playing this.

The screen display is organised into four windows, the largest of which holds the Grid plan and looks like figure 4. You are
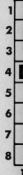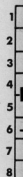
represented by a turtle graphics arrow which has a handy advantage over a line drawn figure. The turtle draws the arrow in a series of four movements (fig. 5) and the arrow will appear pointing the way in which the turtle is aimed.

Lines 1170 to 1290 draw the arrow and the direction is set by the procedure "Gun" (1080 to 1120) which in turn calls three functions, Gun_x, Gun_y and Gun_r which

return the x and y position and the initial rotation.

The program uses windows, circles, blocks, filled shapes and turtles. In addition, the not incosiderable calculating and data manipulation power of the QL is used extensively.

Happy spying!

● **Ian Kennedy, Ian Williams and Steven Hollywood**

Fig. 1

Fig. 2

Fig. 3

BEAM DIRECTLY
REFLECTED FROM
CONTIGUOUS OBJECTS

BEAM INTERNALLY
DISPLACED

BEAM DIRECTLY
REFLECTED FROM
OBJECTS NEXT TO PERIMETER
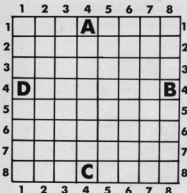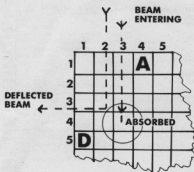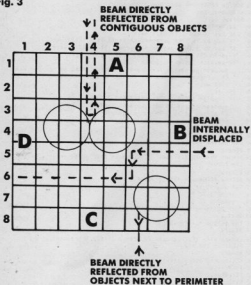
Fig. 4

STATUS WINDOW

A1 : D4

SCORE
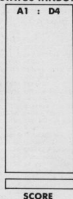
TURTLE GRAPHIC ARROW

PROMPTS
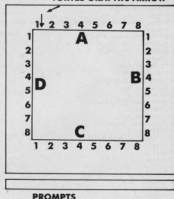
```
100 REMark
110 REMark
120 REMark
130 REMark
140 REMark
150 REMark
160 REMark
170 REMark
180 REMark
190 REMark
200 REMark
210 REMark
220 REMark
230 CLEAR
240 gun_gunpos,7
250 REPeat mainloop
260   gun
270   IF key && 4 THEN fire
280   IF key && 8 THEN ask
290   IF key && 32 THEN reveal:close_down
300   MOVE#box,2
310   gun oldpos,0
320   gun gunpos,7
330 END REPeat mainloop
340 STOP
350 REMark
360 REMark **** This routine sets up windows, arrays & variables
370 DEFine PROCedure diabo
380 box1,3
390 mars5
400 mars=5
410 OPEN#box,scr_512x256a00x00
420 CLS#box
430 OPEN#box,scr_256x240a00x0
440 OPEN#box,scr_158x240x24
450 OPEN#box,scr_158x240x24
460 OPEN#comm,scr_158x24a0x241_10
470 BORDER#box,1,7,0
480 BORDER#ab,1,4
490 BORDER#mars,1,7,4
500 BORDER#ques,1,7
510 CLS#ab
520 CLS#ab
530 CLS#ques
540 CSIZE#ab,1,0
550 CSIZE#ques,2,1
560 INK#ques,7
570 PRINT#ques,"Score"
580 mars=0
590 print_score
600 draw_box
610 mov_nu
620 nue_things=8
630 DIM grid(size+2,size+2),gone1(size+1)*4-1),guess(nue_things-1,1
640 fill_grid:nue_things
650 mov_nu
660 END DEFine diabo
670 REMark
680 REMark
720 REMark **** This procedure sets up the game board (#box) window
730 DEFine PROCedure draw_box
740 BLOCK#box,200,160,40,30,4
750 BLOCK#box,196,158,42,31,2
760 INK#box,7
770 CSIZE#box,0,1
780 CURSOR#box,25,1,0x20
790 CURSOR#box,25,1,0x20
800 CSIZE#box,2,1
810 CURSOR#box,265,10xx20
820 PAPER#box,4
830 CURSOR#box,20,4,25,0
840 PRINT#box,a$
850 NEXT a
860 CSIZE#box,2,1
870 CURSOR#box,20,4,25,0
880 PRINT#box,a$
890 NEXT a
900 INK#box,7
910 A=a$20
920 CSIZE#box,2,1
930 PAPER#box,z
940 RESTORE 1010
950 FOR a=0 TO 3
960   READ a$,x,y
970   CURSOR#box,x,y
980   PRINT#box,a$
990 NEXT a
1000 END DEFine draw_box
1010 DATA "a",132,35
1020 DATA "b",215,100
1030 DATA "c",132,165
1040 DATA "D",50,100
1050 REMark
1060 REMark **** This proc is used to set the turtle direction
     "gun"

1070 REMark
1080 DEFine PROCedure gunpos,c
1090 POINT#box,gun_xpos!,gun_ypos
1100 TURN#box,gun_ypos
1110 arrow:c
1120 END DEFine gun
1130 REMark
1140 REMark **** This one is uses the turtle graphics to draw an arrow
1150 REMark **** of colour (c)
1160 REMark
1170 DEFine PROCedure arrow:col
1180 MOV#box,col
1190 PENDOWN#box
1200 TURN#box,135
1210 TURN#box,135
1220 TURN#box,135
1230 TURN#box,135
1240 MOV#box,SQRT(8)
1250 TURN#box,135
1260 TURN#box,-45
1270 TURN#box,-45
1280 MOV#box,-5
1290 END DEFine arrow
1300 REMark
1310 REMark **** This is used to unscramble the arrows (x_coord)
     position
1320 REMark **** using the gunpos variable (returns graphic
     coord)
1330 REMark
1340 DEFine FuNction gun_x(u
1350 a=u DIV 8
1360 IF side=1 THEN RETurn 81-37.5*(side 2)
1370 IF side=2 THEN RETurn 71.(-(u MOD 8)*7.8
1380 RETurn ia.5+u MOD 8)*7.8
1390 REMark
1400 REMark **** Ditto for the co-ordinate
1410 REMark
1420 DEFine FuNction gun_y(u
1430 a=u DIV 8
1440 IF side=1 THEN RETurn 25+(u MOD 8)*6,4
1450 IF side=2 THEN RETurn 83.8-(u MOD 8)*6,4
1460 RETurn 93.5-49+(side 8,0
1470 REMark
1480 REMark **** Yet another bit to calculate the turtle setting to
     enable
1490 REMark **** the turtle to be rotated to the right direction
1500 DEFine FuNction gun_r(u
1510 RETurn 270-(u DIV 8)*90
1540 REMark **** This routine does most of the moving of the arrow using
     the
1550 REMark **** KEYROW and INKEY functions
1560 REMark
1570 DEFine PROCedure move_gun
1580 oldpos=gunpos
1590 REPeat wait
1600   key=KEYROW(1)
1610   IF key && 104 THEN gunpos=(gunpos) && 31)EXIT wait
1620   IF key && 2 THEN gunpos=(gunpos-1) && 31)EXIT wait
1630   key=INKEY$(0) & "
1640   IF key&1 INSTR "AaBbCcDd" THEN
1650     gunpos=(gunpos && 7)+(key&(1) INSTR "AaBbCcDd"-1) DIV 2)*8
1660     IF (gunpos=" oldpos) AND key=" " THEN gunpos=" "
1670     EXIT wait
1680   END IF
1690   IF key&(1) INSTR "12345678" THEN
1700     gunpos=(gunpos && 24)+(key&(1) INSTR "12345678")-1
1710     IF gunpos && 1) THEN gunpos=gunpos-1
1720     EXIT wait
1730   END IF
1740 END REPeat wait
1750 END DEFine move_gun
1760 REMark
1770 REMark **** Initialises 'n' BLOBS in the 'grid' array. The more
     the harder
1780 REMark
1790 DEFine PROCedure fill_grid:n
1800 REPeat FOR a=1 TO n
1810   x=RND(1 TO 8)
1820   y=RND(1 TO 8)
1830   IF NOT(grid(x,y)) THEN grid(x,y)=1:ELSE a=a-1
1840 END DEFine fill_grid
1850 REMark
1860 DEFine PROCedure plot:x,y
1870 REMark
1880 REMark **** Plot is used to draw a circle (representing a
     BLOB) in the box
1890 REMark
1900 DEFine PROCedure plot:x,y
1910 INK#box,2
1920 CIRCLE#box,gun_x+y gun_y(y+8)-1,a,4
1930 FILL#box,0
1940 END DEFine plot
1950 REMark
1960 REMark **** The hub of the whole game, it 'moves' the ball within the
     box
1970 REMark **** calculates and displays enter and exit points
1980 REMark
```

20

```
1990 REMark
2000 DEFine PROCedure fire
2010 IF gone(gunpos) THEN
2020   IF gone(gunpos)=1 THEN
2030     message "ALREADY TRIED !"
2040   ELSE message "REVERSE ALREADY TRIED !"
2050   END IF
2060   RETurn
2070 END IF
2080 gone(gunpos)=1
2090 side=gunpos DIV 8
2100 PRINT#tab," "!1 TO (eov_num(10));mov_num;" TO 4;"ABCD"
      (side+1)!"12345678"!((gunpos && !!(gunpos && !is47)+1)!)" ";
2110 mov_num=mov_num+1
2120 IF side && 1 THEN
2130   xpos=(size+2)*(side-7)/2
2140   ELSE ypos=(size+2)*(side && 7)+1
2150 END IF
2160 IF NOT(side && 1) THEN
2170   ypos=(size+2)*(side DIV 2)
2180   ELSE xpos=(size+2)*(side && 7)+1
2190 END IF
2200 IF NOT(side && 1) THEN xdir=dydir=1 else
2210 IF side && 1 THEN ydir=dxdir=size-2
2220 REMark movloop
2230   GO TO 2270
2240   IF (ypos=ydir) INSTR "09" THEN xpos=xpos+dir INSTR
        "09" THEN EXIT movloop
2250   IF (ypos=ydir) INSTR "09" THEN xpos=xpos+dir
        EXIT movloop
2260 REMark movloop
2270   IF (ypos=ydir) INSTR "09" THEN xpos=xpos+dir,
2280     PRINT#at,xpos!ydir!"absorbed"
2290     xpos=xpos+dir
2300     ypos=ypos+dir
2310     score!1
2320   END IF
2330   GO TO movloop
2340   xpd=xdir+NOT(xdir)
2350   ypd=ypos+NOT(ydir)
2360   IF grid(xpos+dir+xdir,ypos+ydir+ypd) THEN
2370     xdir=xpos+dir+xdir
2380     ypos=ypos+dir+ypd
2390   END IF
2400   IF grid(xpos+dir+xpd,ypos+ydir+ypd) THEN
2410     xdir=xpos+dir+xpd
2420     ypos=ypos+ypd
2430   END IF
2440   xpos=xpos+dir
2450   IF xpos>9 OR xpos=0 OR xpos=9 OR xpos=9 THEN EXIT movloop
2460 END REPeat movloop
2470 END IF
2480 score!1
2490   IF xpos=0 THEN
2500     PRINT#tab,"8D"!(1+NOT(xpos))!"12345678"!(ypos
2510     e=((ypos-!)" "!((ypos-10&)!+NOT(xpos)
2520   IF (gone)=1 THEN gone!=2
2530 END IF
2540   IF xpos=0 THEN
2550     PRINT#at,"CA"!(1+NOT(xpos))!"12345678"!(ypos
2560     e=((ypos-!)" "!((ypos-10&)!+NOT(xpos)
2570   IF (gone)=1 THEN gone!=2
2580 END IF
2590 END DEFine fire
2600 REMark
2610 REMark **** This one is used to increase the score. It is
2620 REMark     increased by
2630 REMark     1 One, displayed and followed by a bleep it times.
2640 DEFine PROCedure score!i
2650   FOR a=1 TO i
2660     marks=marks+1
2670     print_score
2680     BEEP 1000,50
2690   IF BEEPING THEN GO TO 2690
2700 NEXT a
2710 END DEFine score!i
2720 REMark
2730 REMark **** Prints present score in the window(#ark) to
2740 REMark     6 figures.
2750 DEFine PROCedure print_score
2760 REMark#,0,6
2770 a$="00000" & marks
2780 PRINT#ark,a$(LEN(a$)-5 TO 100)
2790 END DEFine print_score
2800 REMark
2810 REMark **** The ask procedure is called when you think
2820 REMark     you know where the
2830 REMark     sub co-ordinates are valid and not repeated and
2840 REMark     increases the score
2850 REMark     during the game depending upon your guess.
2860 DEFine PROCedure ask
2870 wrong!=0
2880 x=0;y=0
2890 guess(0,x)=0;guess(0,y)=0
2900 FOR a=1 TO num_things
2910   INPUT#ques,!"Input x co-ordinate of no." & a ! ; x$
2920   IF NOT(x$ INSTR "12345678") OR x$="" OR LEN(x$)(>1 THEN
2930     message "Invalid Co-ordinate"
2940     GO TO 2910
2950   END IF
2960   IF x$="" THEN EXIT a
2970   INPUT#ques,!"Input y co-ordinate of no." & a ! ; y$
2980   IF NOT(y$ INSTR "12345678") OR y$="" OR LEN(y$)(>1 THEN
2990     message "Invalid Co-ordinate"
3000     GO TO 2970
3010   END IF
3020   x=x$;y=y$
3030   IF guess(b,x)=x AND guess(b,y)=y THEN
3040     message "You've already entered that one."
3050     FOR a=1 TO a-1
3060     GO TO 2910
3070     EXIT a
3080   END IF
3090 END FOR b
3100   IF guess(b,x)=x AND guess(b,y)=y THEN GO TO 3140
3110     IF NOT(grid(x,y)) THEN wrong!=wrong!1
3120     guess(a,x)=x
3130     guess(a,y)=y
3140 END FOR a
3150 CLS#ues
3160   IF x$="" OR y$="" THEN RETurn
3170   IF NOT(num_wrong) THEN correct
3180   IF num_wrong THEN DIM(guess)
3190   IF NOT(a && 1) THEN PRINT#tab,3 dum;
3200     PRINT#tab," "((guess(a,x)!,"(guess(a,y)!)")
3210   NEXT i
3220   IF NOT(wrong) THEN correct
3230   score wrong!5
3240   message "You've guessed " & (num_things-wrong) &
          " correct coordinates!"
3250 END DEFine ask
3260 REMark
3270 REMark **** Message sends a string parameter to the 'ques'
3280 REMark     channel, it is
3290 REMark **** Bleeps and pauses returning with the window cleared.
3300 DEFine PROCedure message(a$)
3310 LOCal a
3320 CLS#ques
3330 AT#ques,0,22-LEN(a$)/2
3340 PRINT#ques;a$
3350 INK#ques,0
3360 INK#ques,4
3370 BEEP 5000,0
3380   FOR a=0 TO 270;a=a+INKEY$(0):LEN a
3390 CLS#ques
3400 END DEFine message
3410 REMark
3420 REMark **** Uses plot to put all the BLOBS on the screen as
3430 REMark     filled in circles
3440 DEFine PROCedure reveal
3450   FOR x=1 TO 8
3460   FOR y=1 TO 8
3470   IF grid(x,y) THEN plot x-1,y-1,7,1,
3480 NEXT y
3490 NEXT x
3500 END DEFine reveal
3510 REMark
3520 REMark **** This one is called if you have managed to find all
3530 REMark     the BLOBS
3540 reveal
3550 REMark **** last you've got it"
3560 message "At last you've got it"
3570 close_down
3580 END DEFine correct
3590 REMark
3600 REMark **** This gives the option whether to rerun or end the program
3610 DEFine PROCedure close_down
3620 INPUT#ques,"Do you want another game (Y/N)";a$
3630   IF a$ INSTR "Yy" THEN CLEAR;RUN
3640   IF a$ INSTR "Nn" THEN GO TO 3640
3650   CLOSE#tab
3660   CLOSE#ark
3670   CLOSE#ques
3680   CLOSE
3690   MODE 0
3700   STOP
3750 END DEFine close_down
```

OPERATION KRISTOS

● BBC B

A strange alien ship has been picked up on radar heading towards the Earth.

After three days it goes into orbit and fails to respond to radio messages. A preliminary scan reveals a large carbon dioxide laser aimed at London.

The Royal Navy attacks but all ships are lost when a strange wave of pink light radiates out from the ship.

Now the plan has been decided. A Space Marine must dock with the ship, plant a large mine and then teleport back before it explodes. Only then can the Earth be saved from the alien menace that hangs overhead.

You have been chosen for the mission and must dock with the ship armed with only a teleport bracelet and a limpit mine that must be attached to the laser to ensure maximum destruction.

The following commands may be used but there are more: GET, DROP, INVENTORY, SCORE, EXAMINE, TELEPORT, PRIME (for the mine).

To move, use the following abbreviations: N — to go North, S — to go South, E — to go East, W — to go West, U — to go Up, D — to go Down.

Any other word may be abbreviated to four letters.

The symbol, which appears in a number of lines, is the up-arrow. This is to the right of ! = ' on the keyboard.   ● JW Reynting

```
10 DATA "YOU'RE IN YOUR SPACESHIP BUT
IT HAS BEENWRECKED PROBABLY WHEN LANDI
NG ON AUTO   PILOT.AN EXIT LEADS NORTH"
20 DATA "YOU ARE STANDING IN A SHINY,
METALLIC   VACUUM TUBE.YOU CAN GO NORTH
AND SOUTH"
30 DATA "YOU'RE STANDING IN A AIRLOCK
.TO THE WESTIS A SHINY DOOR.TO THE SOUTH
IS A   CORRIDOR.THE DOOR HAS NO VIS
IBLE MEANS   OF BEING OPENED."
40 DATA "YOU ARE IN A STEEL CORRIDOR.
THERE IS A   SIDE EXIT TO THE EAST AND TH
E CORRIDOR   LEADS NORTH AND SOUTH."
50 DATA "YOU ARE IN A DARK STOREROOM.
IT IS   EXTREMELY COLD AND SMELLY IN
HERE.THE   ONLY EXIT IS TO THE NORTH."
60 DATA "YOU ARE STANDING ON A METAL
GRILL ABOVE A CHANNEL IN THE FLOOR ABOUT
6 INCHES   BELOW.THERE IS AN EXIT NORTH
WARDS OVER   THE GRILL AND A CORRIDOR LEA
DS SOUTH."
70 DATA "YOU ARE ON THE FLIGHT DECK O
F THE SHIP   A LARGE VISUAL DISPLAY SHOWS
A PICTURE   OF THE EARTH AND TO YOUR LE
FT IS A   CONTROL PANEL.EXITS LEAD NOR
```

```
TH.SOUTH   & EAST."
80 DATA "YOU'RE IN THE CONTROL ROOM.A
LARGE BANK OF COMPUTERS ADORN THE NORTH
WALL.EXITS LEAD EAST AND WEST."
90 DATA "YOU ARE IN THE REST ROOM.THE
RE IS A BED HERE AND A TABLE.BEDSIDE TAB
LE.AN SINGLEEXIT LEADS WEST."
100 DATA "YOU'RE IN THE CAPTAIN'S CABI
N.RICH,SOFT CARPET COVERS THE FLOOR AND
THE WALLS   ARE TASTEFULLY PAINTED IN LI
GHT SHADES.  THERE IS A LARGE BED TO THE
LEFTHAND   SIDE.THE ONLY EXIT IS TO THE
SOUTH"
110 DATA "YOU ARE IN A DARKISH ROOM AN
D ALL AROUNDYOU ARE LARGE BANKS OF LEAD
ACID       BATTERIES.THERE IS A DISTINC
T SMELL OF GREASE HERE.UP IS A ROPE AND
OTHER EXITSLEAD EAST AND SOUTH."
120 DATA "YOU'RE IN A SPARSE ROOM.AN E
XIT LEADS   EAST AND A RUBBISH CHUTE GOE
S DOWN     THROUGH THE FLOOR."
130 DATA "YOU ARE STANDING ON ONE SIDE
OF A CHASM THE SOUTH THAT CAN BE CRO
SSED ON AN EXTENDING BRIDGE.A LARGE RED
BUTTON     STICKS OUT FROM THE WALL."
140 DATA "YOU ARE STANDING ON ONE SIDE
OF A CHASM TO THE NORTH.AN EXTENDED BRI
DGE LEADS   NORTH.ANOTHER EXIT IS TO THE
SOUTH."
150 DATA "YOU ARE IN A RUBBISH COMPRES
SOR.RUBBISH LIES EVERYWHERE AND THERE IS
A SMELL OF DECAYING ORGANIC MATTER.THE
COMPRESSOR  CONTINUESS SOUTHWARDS.ABOVE I
S A CHUTE   WHICH IS OUT OF REACH."
160 DATA "YOU ARE IN A RUBBISH COMPRES
SOR.A STEP  LADDER LEADS UPWARDS.THE COM
PRESSOR    CONTINUES NORTH."
170 DATA "YOU ARE AT A T-JUNCTION OF PASS
AGES GOING NORTH.EAST AND WEST."
180 DATA "YOU'RE AT A DEAD END.THERE I
S A HATCH   IN THE WEST WALL.THE ONLY EX
IT IS EAST."
190 DATA "YOU ARE IN A HEXAGONAL CORRI
DOR.THE     WALLS ARE HEAVILY CORRODED A
ND DIGESTIVEJUICES LIE IN POOLS ON THE F
LOOR.EXITS  LEAD EAST AND WEST."
200 DATA "YOU ARE IN A CONTROL CENTRE.
THERE IS A  LARGE DOME OVERHEAD.A ENORMO
US LASER GUNIS AIMED AT A HOLE IN THE DO
ME TOWARDS  THE EARTH."
210 DATA "YOU ARE IN A SMALL ROOM.A CO
MPUTER IS   PLUGGED IN ON THE WEST WALL.
AN EXIT     LEADS EAST."
220 DATA "YOU ARE IN A SMALL ROOM.ALL
AROUND IS   DEBRIS.IT LOOKS AS IF THERE
HAS BEEN AN EXPLOSION.AN EXIT LEADS EAST
."
230 DATA "YOU ARE IN A DARKISH ROOM AN
D ALL AROUNDYOU IS THE REMAINS OF LEAD A
CID        BATTERIES.THERE IS A DISTINC
T SMELL OF  GREASE HERE.UP IS A ROPE AND
OTHER EXITSLEAD EAST AND SOUTH."
240 RESTORE 250:PORN=&C00 TO &C12:READ
```

```
A:?N=A:NEXT
  250 DATA &A0,&00,&B9,&00,&0A,&49,&1B,&
C9,&16,&F0,&07,&20,&E3,&FF,&C8,&AC,&02,&
0C,&60
  260 DIM O(23),O$(23):PROCobj:MODE7:IN=
2:RN=1:DIM D(6,24):BN=0:TN=0:PROCroomdat
a:GOSUB1050
  270 REPEAT:INPUT:"IN$";UNTIL LEN(IN$)>
0
  280 N$="":V$=""
  290 V$=LEFT$(IN$,4)
  300 L=3:REPEAT:L=L+1:UNTIL L>LEN(IN$)
 OR ASC(MID$(IN$,L,1))<>32
  310 REPEAT:L=L+1:UNTIL L>LEN(IN$) OR A
SC(MID$(IN$,L,1))<>32
  320 N$=MID$(IN$,L,1)
  330 P=INSTR(V$," ")
  340 IF P<>0 V$=LEFT$(V$,P-1)
  350 P=INSTR(N$," ")
  360 IF P<>0 N$=LEFT$(N$,P-1)
  370 GOTO1880
  380
  390 D%=V
  400 IF D(DN,RN)=0 PRINT"YOU CAN'T GO T
HAT WAY":RETURN
  410 IF D(DN,RN)>34 GOTO1690
  420 RN=D(DN,RN)
  430 RN=D(DN,RN):GOSUB 1050:RETURN
  440 IF N>14 PRINT"YOU CAN'T PICK THAT
UP":RETURN
  450 IF O(N)<>RN PRINT"I DON'T SEE THAT
 HERE":RETURN
  460 IF IN>=5 PRINT"YOU'RE CARRYING TOO
 MUCH":RETURN
  470 IF N=8 AND RN=16 PRINT"IT'S WEDGED
 TIGHT":RETURN
  480 IF N=4 AND LEN(O$(4))=34 PRINT"IT'
S TIED":RETURN
  490 IF N=6 AND O$(8)<>-1 OR RN=5 AND O$
(8)="ZU;NUWRO;OTIXS" PRINT"IT'S TOO DARK
 TO SEE":RETURN
  500 IF N=6 AND LEN(O$(5))<>11 AND O(6)
<>-1 PROCd("BTN;XZU<O;I"ZXS;RO"):RETURN
  510 IF N=5 AND LEN(O$(5))<>11 AND O(6)
=-1 PROCd("BTN;STTP;RO;TNO;LROS;BTNI;LRI
"I);O(5)=-1:IN=IN+1:O$(5)="Z;YWZXP;YTC":
PRINT:"OK":RETURN
  520 O(N)=-1:IN=IN+1:PRINT"OK":RETURN
  530 IF N>15 PRINT"I NEVER LET YOU PICK
 THAT UP":RETURN
  540 IF O(N)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
  550 IF N=11 AND O(22)=-99 PROC
d("OS";_ITR_;Y"KH;:OS;KI"KH"N;OS;:YN
OOTUZ;HXZUU"I;XTV"H;TU;=OS"U;I"OIZXOH5O
S";YIR_;IRH"CO"U_;"R);:N1=1:O(11)=1
3:O(22)=13;D(2,13)=9:RETURN
  560 IN=1:O(N)=RN:PRINT"OK":RETURN
  570 PRINT"YOU ARE CARRYING:":IF IN=0 P
RINT"NOT A LOT":RETURN
  580 FOR loop=1 TO 14
  590   IF O(loop)=-1 PROCd(O$(loop))
  600 NEXT
  610 RETURN
  620 IF RN<>11 OR N<>32 PRINT"DON'T BE
A VANDAL":RETURN
  630 IF O(10)<>-1 PRINT"WHAT WITH?":RET
URN
  640 PROCd("BTN;HVZHS;NK;OS";YZOO"IR"H;
LROS;OS:::::;ZU_ITR_;W"\"):RETURN
```

```
=23;D(6.10)=23;D(3.12)=23
  650 RETURN
  660 IF N<>20 OR RN<>19 PRINT"DON'T BE
NASTY":RETURN
  670 IF O(21)=19 PRINT"I CAN ONLY KILL
HIM ONCE":RETURN
  680 PRINT"LOVE TO BUT HOW?":RETURN
  690 IF N<>25 GOTO840
  700 RN=1:PRINT"OK":RETURN
  710 IF N=47 PRINT"SAY WHAT?":RETURN
  720 PRINT"IF O(4,3)=4 RETURN
  730 IF RN<>3 OR D(4,3)=4 RETURN
  740 O$(4)="ZU;TI;RH;MTRX";TK"IZO";:
ZU_RO;NHWS;:NK"_HTY"U")
  750 O(15)=-3;D(4,3)=4
  760 PRINT:RETURN
  770 IF O(8)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
  780 IF TN=-1 PRINT"IT DOESN'T WORK":RET
URN
  790 O$(8)="Z;WRO;OTIXS
  800 O$(8)="ZU;NUWRO;OTIXS":PRINT"OK":R
ETURN
  810 IF O(8)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
  820 IF LEN(O$(8))<>11 PRINT"IT'S NOT O
N":RETURN
  830 O$(8)="ZU;NUWRO;OTIXS":PRINT"OK":R
ETURN
  840 IF O(3)=-3 PROCd("BTN;SZM";UT;VZO
XS"H"):RETURN
  850 IF N=8 AND O(8)=-1 PROCd("OS";OTIX
S;KWZHORX;ZWW;V"WOH"):RETURN
  860 IF N=3 AND RN<>5 PRINT"OK":RETURN
  870 IF N<>3 PRINT"YOU CAN'T LIGHT THAT
":RETURN
  880 PROCd("OS";VZOXS;;WZI"H;NK;ZH;_HH_
_UWB;Z;]RI";YZWW;"CKWT_H5OS"I;VNHO;SZ
M"I;Y"I::::::;CKWTHRM"_ZH"H;ZITNU_"):GO
TO1810
  890 INPUT"NAME OF FILE";F$
  900 X=OPENUP(F$):INPUT#0,RN,O$(4),O$(8
),O$(9),O$(15),IN
  910 FOR loop=1 TO 23:INPUT#0,O(loop):N
EXT
  920 INPUT#0,D(4,3),D(1,4),D(6,10),D(2,
15),D(2,13),D(4,14),D(3,19),D(3,12),D(4,
8)
  930 CLOSE#0:PRINT"OK":GOTO1050
  940 PRINT"NAME OF FILE":F$
  950 O=OPENOUT(F$):PRINT#0,RN,O$(4),O$(
8),O$(9),O$(15),IN
  960 FOR loop=1 TO 23:PRINT#0,O(loop):N
EXT
  970 PRINT#0,D(4,3),D(1,4),D(6,10),D(2,
15),D(2,13),D(4,14),D(3,19),D(3,12),D(4,
8)
  980 CLOSE#0:PRINT"OK":GOTO 1050
  990 IF N=23 AND RN=3 PROCd("OS";_TTI;S
ZH;ZH;MRHRYW"V"ZUR_TI";Y"RU";:TK"U"_"):R
ETURN
 1000 IF N<>19 OR RN<>18 PRINT"YOU CAN'T
 DO THAT":RETURN
 1010 IF O(13)<>-1 PROCd("BTN;:O"_;HTV"O
Y"U;RO;LROS):RETURN
 1020 IF O$(9)<>11 PRINT"BIG;YKOB;YTOOW" PROCd(
"BTN;ZI"U<O;HOITU_;"UTN"S"):RETURN
 1030 IF O(23)=18:PRINT"IT'S ALREADY OPE
N":RETURN
 1040 O(23)=18:PRINT"OK":RETURN
 1050 RESTORE (RN=10):IF RN=5 AND O$(8)=
```

```
"ZU;NUWRO;OTIXS" OR RN>10 AND O$(8)="ZU;
NUWRO;OTIXS" PRINT"IT'S TOO DARK TO SEE"
:RETURN
1060 READ R$:PRINTR$
1070 FORN=1 TO 23:IF O(N)<>N GOTO100
ELSE IF N<15 PRINT"HERE THERE IS ":PROC
d(O$(N)) ELSE PROCd(O$(N))
1080     NEXT
1100 IF RN<>20 PRINT"YOU HAVE TO SOLVE
THIS ADVENTURE!":RETURN
1110 IF O(2)<>20 OR D(6,10)=11 OR D(4,1
2)=21 PRINT"IT'S BEING JAMMED":RETURN
1120 PROCn
1130 PROCd("OSRH;HR;UT;ORV":OT;HW^K5BT
N<M^:\T:OT;:HZM^:OS^;^ZIOS"):RETURN
1140 IF N<>4 PRINT"YOU CAN'T TIE THAT":
RETURN
1150 IF O(4)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
1160 IF RN<>4 OR O(19)<>10 PRINT"NO PO
INT IN DOING THAT HERE":RETURN
1170 PRINT"OK":D(6,10)=11:O$(4)="Z;W^U\
OS:IT;IT^:SZU\RU\_TLULZI_R":O(4)=10:IN
=N-1:RETURN
1180 PRINT"YOU CAN'T DO THAT":RETURN
1190 IF N=0 PRINT"FIRE! WHERE?":RETURN
1200 IF N<>14 PRINT"YOU CAN'T FIRE THAT
":RETURN
1210 IF O(N)<>-1 PRINT"YOU DON'T HAVE I
T":RETURN
1220 IF RN<>19 PRINT"DON'T BE VIOLENT":
RETURN
1230 IF O(21)=21 PRINT"AT WHAT?":RETURN
1240 PROCd("OS^;KSTOTU;IZB;SROH;OS^;KWZ
UO;ZU_;OS^I^;RN;ZU;^CKWTHRTU;T]:KW2UO;]W
^HS")
1250 IF O(20)=99:O(21)=19:D(5,3)=4:RETUR
N
1260 IF RN>21 OR RN<>13 PRINT"YOU CAN'T
PRESS THAT":RETURN
1270 PROCd("HXZUU^;HZUXRO^H5Zi_RZW;
]WZHS^H;OS^:;LZIURU\<SNVZU<EKN___^UWB:Z\
:\TNK:T]:::::ITYTOH;ZKK^ZI;ZO;OS^:TOS^I;
HR]:OS^:;XSZHVW")
1280 TIME=0:REPEATUNTIL TIME>70
1290 PROCd("OS^B;TK^U;]RI^"):GOTO1810
1300 IF N=0 PRINT"I don't understand":R
ETURN
1310 IF RN<>4 AND RN<>530
1320 IF O(N)<>-1 GOTO530
1330 IF RN=15 AND N=7 PROCd("OS^:IT_;]W
H;HITNO\LZI;ZU_;Y^YTV^HI;:;^_\`^L^_;^Y^O
L^:U:OS^;LZWH^HT^]:D(2,15)=16:O(7)=99:IN
=1:RETURN
1350 IF RN=15 AND D(1,6)=7 GOTO530
1350 IF N<>2 PROCd("Z;XZV^IZ;HWR;HTNO
:ZU;OIZXPH;OS^;TYQ^XOZ;HKZ\^I]:NU;WTXPH;
TUOT;OS]=IT_I";;RI^H]"):IN=IN-1:O(N)=99:RETU
RN
1360 PROCd("Z;MR_^T;XZV^IZ;HWR;HWR;TNO;Z
\H]OS^;RH^;`RH;RH:^]:\O^]_]]:OS^;Y^Z\H
OZW^ZU_;OS^;YZ\Z\^UT]:XZV^IZ]")
1370 O(2)=4:O(16)=4:IN=IN-1:D(1,4)=6:R
ETURN
1380 IF RN>14 AND D(6,6)<>6 PROCd("OS^;;_TTI;V
NHO;TK^U;TU;TU;TU;2;X IOZRU;ZXORTU"):RETURN
1390 IF RN=14 AND N=26 AND O(15)=99 PROCd
("BTN:H^^:Z;HOR]:HOR]:LRI^RUHR_^T"
```

```
:O(6)=7:RETURN
1400 IF RN=9 AND N=18 AND O(8)=99 PROCd
("BTN]:RU_;Z:OTIXS5HTV^TU^:VNHO;SZM^;Y^^
U:I^Z_RU;NU_^I;OS^:^OH^^OH]"):O(8)=RN;RET
URN
1410 IF N=34 AND RN=16 PRINT"IT LOOKS V
ERY LUXURIOUS":RETURN
1420 IF RN=30 AND RN<>15 AND O(11)=99 PRO
Cd("BTN]H^^:Z;HIVZHWW;_ITR_^"):O(11)=RN:RET
URN
1430 IF RN=17 AND RN=18 AND O(23)=18 PRO
Cd("BTN]:RU_;ZY;YWZHO^I"):O(1)=18:RETURN
1440 PRINT"YOU SEE NOTHING SPECIAL":RET
URN
1450 IF RN=3 AND D(4,3)=0 PROCd("BTN;_T
U<O\I^^:S^WK:OT;TK^U;Z;_TTI;_TTI"):RETURN
:RETURN
1460 IF RN=19 AND O(21)=19 PRINT"KILL I
T":RETURN
1470 PRINT"YOU'RE ON YOU OWN HERE":RETU
RN
1480 IF RN<>4 AND RN<>6 PRINT"YOU'RE NO
T DOING THAT HERE":RETURN
1490 IF RN<>10 AND D(6,10)<>0 PRINT"YOU'
VE ALREADY DONE THAT":RETURN
1500 IF RN<>10 PROCd("BTN;IRK;NK;OS^:XZI
K^OLOT;I^M^ZW;Z;ZKRU\<ZKRU\<ZKRU\;D(6,10)=RII:
O(19)=RN:RETURN
1510 PROCd(" BTN;KNWW;OS^;XTVKNO^I;ZU_;
RO;NUKWWH5);::I^;RH;ZI;VZHHRM^^;^CKWTHR
TU"):RN=RN:Z;D(4,14)=RN:GOTO1050
1520 SN=0
1530 IF D(4,3)=4 SN=SN+100
1540 IF D(1,4)=RN SN=SN+100
1550 IF D(6,10)<>0 SN=SN+100
1560 IF D(2,15)=16 SN=SN+100
1570 IF D(3,18)=18 SN=SN+100
1580 IF D(3,19)=20 SN=SN+100
1590 IF D(2,13)=23 SN=SN+100
1600 PRINT"YOUR SCORE ";SN;" OUT OF 800"
:RETURN
1610 IF RN<>36 PRINT"YOU CAN'T DRINK THA
T":RETURN
1620 IF O(9)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
1630 IFO(9)="ZU;^VKOB;YTOOW^" PRINT"YO
U ALREADY HAVE":RETURN
1640 PRINT"DELICIOUS":O$(9)="ZU;^VKOB;Y
TOOW^":RETURN
1650 IF O(2)<>-1 PRINT EH?"":RETURN
1660 IF O(2)<>-1 PRINT"YOU'RE NOT CARRY
ING IT":RETURN
1670 IF RN<>2 PROCd("BTN<M^:\TO:OT;OT;ZOO
ZSS:RO:OT;^WZH^I]"):RETURN
1680 PROCd("TP;HTOK:ZOOZXS:RO:OT;OS^;WZH
I"):IN=IN-1:O(2)=20:D(4,2)=42:RETURN
1690 SN=SN+RN-34
1700 ON SN GOTO1710,1720,1730,1750,1760
,1770,1780,1790,1800
1710 IF RN>1 AND V=1 AND RN=RN-2:GOTO
1050 ELSE IF V=1 AND V=2 AND RN-3:RETURN
:GOTO1050 ELSE PROCd("OS^I;RN;HT;ZRI;RU
;RU;ZMXNNV;OS^B;ITV^;NU]:ITV^]";ITV]TXZOR
TU"):GOTO1810
1720 PROCd("Z; MR_^T;XZV^IZ;LRTH;WTXPH;TUOT;
BTN;;ZU_;IU_]:OS^;ITIM^;RH;ZMZRWZYW^]":RU
;Z:MZXNNV;OS^B;KWZ]:I^M^ZW]:ITV^]"):TXZOR
TU"):GOTO1810
1730 IF O(6)<>-1 PROCd("OS^;ZU_ITR_;ON;ON;ON
IU;ZITNU_50S^B;KNWW;TNO;OS^;^RI;YWZHO^I;IH
LING IT":RETURN
```

```
       ZU_;]RI^:ZO;BTN3UTO:M^IB:URX^:OSZO2^);GO
   TO1810
       1740 PROCd("Z:WR^SO;TU;BTNI;YWZXP:YTCc;]
   WZHS^H;ZU_;]:OS^;ZU_ITR_H:HOZIO;\^TRU;\XI
   ZAB;ZU_;OS^U:H^W16_^HOINXO^);GOTO1810
       (3.8)+S^O(18)+8:O(17)+99:WR^H^);GOTO1050
       1750 PROCd("BTN;LZWP;T;]];OS^_;\^I]:OS
   ^:XSZXV;ZU_;_R^);GOTO1810
       1760 PROCd("OS^;LZWWH;T;]];OS^:XTVKI^HXI:
   XWTH^;RU;;;;ZU_:BTN;EI^_IHWTLWB;XINHS^_;]
   ;YOL^U^;OS^;;;LZWWH^);GOTO1810
       1770 PROCd("BTN;OIRK;TM^I;Z_];^W^I;T];O
   S^;KWZUO;ZU_;BTNI;YT_B:HOZIOH^;OS_;RHHTWW
   ^;RU;OS^;;;;;;;;R^^HHM^(QNRX^H");GOTO1810
       1780 PROCd("BTN;]ZWW;_TLU;OS^;STW^;ZU_;
   RU;OS^;;;;;]U^ITXP^);GOTO1810
       1790 PROCd("OS^;WIU^;TXP^");GOTO1810
       1790 PROCd("OS^;XNU^;ZIOS^N^H;ZU_;BTN;S
   ZM^HZM^);OS^;ZIOS;OS^;SZM^;_R^;RU;
   _ZO;VOG^);GOTO1810
       1800 IF O(8)="3";Z;NRO;OTIXS^ AND O(8)=-1
   PROCd("BTNI;OTIXS^;T];TNO");TM=1:RN=13
   GOSUB810:GOTO1050 ELSE RN=13:GOTO1050
       1810 PRINT"OH DEAR YOU APPEAR TO HAVE D
   IED"
       1820 PRINT"YOU REALLY MUST BE MORE CARE
   FUL IN"
       1830 PRINT"FUTURE IF YOU WANT TO GET ON
   IN THIS    GAME"
       1840 ptr=1:GOSUB 1520
       1850 END
       1860 DEFPROCend
       1870 PRINT"WELL DONE.YOU HAVE SAVED THE
   EARTH AND  ARE AWARDED THE TRIPLE STAR.
   YOUR SCORE  IS 800 OUT OF 800":END
       1880 RESTORE 2030
       1890 V=0:REPEAT
       1900 READ T$
       1910 V=V+1
       1920 UNTIL V$=T$ OR T$="*"
       1930 IF T$="*" PRINT"verb not known!!":
   GOTO2070
       1940 IF N$="" N=0:GOTO2100 ELSE IF V=16
    OR V>17 GOTO2010 ELSE IF V=16
       1950 RESTORE 2040
       1960 N=0:REPEAT
       1970 READ N$
       1980 N=N+1
       1990 UNTIL N$=T$ OR T$="*"
       2000 IF T$="*" PRINT"Noun not known!!":
   GOTO2070
       2010 ON V GOSUB380,380,380,380,380,380,
   440,440,530,570,570,620,620,620,710,
   710,770,810,840,940,990,1300,1100,11
   30,1140,1190,1260,1260,1350,1380,14
   50,1480,1480,1480,1060,1650,620,620
       2020 GOTO1050
       2030 DATAN,S,E,W,U,D,GET,TAKE,DROP,INVE
   ,INV,SMAS,BREA,KILL,HOLD,SAY,SHOW,ON,OFF
   ,LIGH,LOAD,SAVE,OPEN,THRO,TELE,SLEE,TIE,
   UNTI,FIRE,PUSH,PRES,LOOK,EXAM,BLAS,CAM
   E,RIP,PULL,SCOR,DRIN,PRIM,KICK,HIT,*
       2040 DATABRAC,MINE,MATC,ROPE,BOX,WIRE,O
   O,TORC,BOTT,LEG,DROI,META,SCRE,BLAS,CAM
   E,ANDR,HOLE,HATC,PLAN,BUTT,BRID,DOOR
   ,OPEN,BREA,PANE,LASE,COMP,CHAS,RUBB,DOME
   ,BATT,ROBO,CARP,CHUT,JUIC,TABLE,AIRL
   ,*
       2050 END
       2060 DEFPROCd(D$)
       2070 $&A00=D$
```

```
       2080 CALL&C00
       2090 PRINT:ENDPROC
       2100 PRINT:ENDPROC
       2100 DEFPROCa:RESTORE 2150
       2110 FORN=1 TO 23
       2120 READ O$(N),O(N)
       2130 NEXT
       2140 ENDPROC
       2150 DATA"Z:O^W^KTIO;YIZX^W^O^,-1,"Z;WR
   VKRO;VRU^",-1,"Z;YTC;T];VZOXS^H^,4,"Z;W^
   U^OS;T];WTK^",5
       2160 DATA"Z;YWZXP;YWZXP;YWZXP:YTC;NU_];;;OS
   ^;LZWPLZB^,6,"Z;KR^X^;T];HOR];LRI^",99,"
   Z;V^ZWW;T]_^,8,"ZU;NUWRO;OTIXS^",99
       2170 DATA"Z;YTXOW^;T];ZIRNW^",9,"ZU;ZU_LR
   TR_;W^",99,"Z;LUIXWU^;_ITR_^,32,"Z;HSRUB;
   HS^;T];]_^IO;WRI^";OZW^",1,"Z;HXI^L_IR^I^,
   14,"Z;HXI^L_IR^I^,14,"Z;
   YWZHO^I",99
       2180 DATA"OS^;;;TTI;RH;UTL;TK^U",99
       2190 DATA"Z;YWTLU6NK;MR_^;T;XZV^IZ;SIGH
   ];ITV;OS^;;;LZWW^,99
       2200 DATA"ITLH^;T];]ZX^W;HH;ZU_ITR_H;HRO
   ;ZO;OS^;;;;XTVKNO^I_H^,8
       2210 DATA"OS^;;;I^VZRUH;T];ZU_ITR_H;HXTM^I
   ;OS^;;WTIT;99
       2220 DATA"Z;ZXRUR;HT;SK^;Z_H;_TLULZI^_^,99
       2230 DATA"OS^;DZOXS^H;_ITR_^,99
       2240 DATA"WZI^ZORU;HTW^",99,"Z;HNZ_ZORU;K
   WZUO;YITNI;BTNI;LZGR^,19
       2250 DATA"Z;WTNI;_ZORU;KWZUO;WR^H
   ^_;;Z;S^I^;99
       2260 DATA"Z;YIR_^^;\;SZH;^CO^U_^_^,99
       2260 DATA"OS^;SZOXS;SXOXS^S^;\;"TU:U^^;OT;O
   ^I^;I^M^;Z^^:;;;ZIP:STW^^,99
       2280 DEFPROCroomdata
       2290 RESTORE 2340
       2300 FORI=1 TO 23
       2310 READ F$:FORM=1 TO 6:D(M,L)=(ASCc
   MID$(R$,M,L))-65):NEXTM
       2320 NEXTL
```

```
       2330 ENDPROC
       2340 DATAaaaaaa
       2350 DATABaaaaaa
       2360 DATAaaaaaa
       2370 DATAeFDAAA
       2380 DATAEaaaaa
       2390 DATAhAaaAa
       2400 DATAKAgiaa
       2410 DATAaaFfaaa
       2420 DATAaaaaaaa
       2430 DATAaaaaaa
       2440 DATAAAaaaaa
       2450 DATAaaLLaaP
       2460 DATAaaaLaap
       2470 DATAaLAavaa
       2480 DATAAHaaaaa
       2490 DATAPapaawa
       2500 DATAaOaaTSA
       2510 DATAaaaaaRA
       2520 DATAAAAAaa
       2530 DATAaaaaaRAA
       2540 DATAAaaaaa
       2550 DATAOAaaaa
       2560 DATANMKAb
```

CAR RACE

• ATARI 16K

Keep the revs up for some super race track action for one or two players.

The race circuit is seen from above and two car — blue and red — are ready at their starting positions. You must aim to break the track record or beat the other car past the finishing line.

The race begins when either joystick is moved. If you crash, your car is put back to the beginning of its current lap. Hitting the track boundary slows down the cars and crashing with other obstacles causes the car to explode.

• Nick Pearce

```
10 GRAPHICS 0:POKE 82,0:? " CAR RACE"
20 ? " by Nick Pearce, (c) 1984":GOSUB 8000
200 GOSUB CARS:GOSUB INFO
360 FOR P=0 TO 1:POKE CRASH+P,0:NEXT P:POKE 19,0:POKE 20,0
399 REM *** LOOP
400 FOR P=0 TO 1
410 IF PEEK(CRASH+P) THEN 600
420 IF PEEK(LAPS+P)=RACELAPS THEN POP :GOTO 800
490 NEXT P
500 IF PEEK(CONSOL)=START THEN 200
550 GOSUB SHOW:IF TIME>6000 THEN 400
560 GOTO 200
599 REM CRASH
600 SOUND P,38,0,14:POKE CP+P,64
610 FOR I=0 TO 30:POKE PCOL+P,RND(0)*255:NEXT I:SOUND P,0,0,0
620 POKE CP+P,80:POKE FX+P,PX(P):POKE FY+P,PY(P)
690 POKE PCOL+P,PCOL(P):POKE PCOL+2+P,PCOL(P+2):POKE CP+P,0:POKE CRASH+P,0
690 GOTO 200
799 REM RACE OVER
800 FOR K=14 TO 2 STEP -1:SOUND 0,40,0,K:NEXT K:GOSUB SHOW
810 RACED=1:CHAMP$="BLUE":IF P THEN CHAMP$="RED"
820 FOR P=0 TO 1:POKE PCOL+P,1:SOUND P,0,0,0:NEXT P
825 FOR N=1 TO LEN(CHAMP$):CHAMP$(N,N)=CHR$(ASC(CHAMP$(N))+128):NEXT N
830 RTIME$=STR$(TIME):IF TIME<BEST THEN BEST=TIME
835 FOR N=1 TO LEN(RTIME$):RTIME$(N,N)=CHR$(ASC(RTIME$(N))+128):NEXT N
840 GOSUB DELAY
999 REM *** SHOW
1000 TIME=INT((PEEK(19)*256+PEEK(20))/5)
1010 N$=STR$(TIME):M$="0000":M$(5-LEN(N$))=N$
1020 POSITION 28,22:FOR I=1 TO 4:? CHR$(ASC(M$(I))+224)::NEXT I
1040 N$=STR$(PEEK(LAPS)):M$="00":M$(3-LEN(N$))=N$
1050 POSITION 22,22:FOR I=1 TO 2:? CHR$(ASC(M$(I))+128)::NEXT I
1060 N$=STR$(PEEK(LAPS+1)):M$="00":M$(3-LEN(N$))=N$
1070 POSITION 36,22:FOR I=1 TO 2:? CHR$(ASC(M$(I))+128)::NEXT I
1090 RETURN
1999 REM *** CARS AT START
2000 FOR P=0 TO 1:SOUND P,0,0,0
2010 POKE FX+P,FX(P):POKE FY+P,PY(P):POKE CP+P,0
2020 POKE PCOL+P,PCOL(P):POKE PCOL+2+P,PCOL(P+2)
2030 POKE LAPS+P,0:POKE LINE+P,0:POKE COUNT+P,1:POKE CRASH+P,1
2050 NEXT P
2090 RETURN
2999 REM *** INFO DISPLAY
3000 J=0:SOUND 0,100,10,4:GOSUB DELAY:SOUND 0,0,0,0
3002 J=J+1:IF J=4 THEN J=1
```

```
3010 POSITION 0,22:? BLANK$:POSITION 0,22
3020 IF J=1 THEN ? "        car race":GOTO 3050
3030 IF J<>2 THEN 3040
3032 ? "     race is ";N$=STR$(RACELAPS):FOR N=1 TO LEN(N$):? CHR$(ASC(N$(N))+224)
:NEXT N:? " laps":GOTO 3050
3040 ? " track record";CHR$(26);" ";:N$=STR$(BEST):FOR N=1 TO LEN(N$):? CHR$(ASC
(N$(N))+224):NEXT N
3050 FOR I=1 TO 5:GOSUB DELAY:IF PEEK(CONSOL)=START THEN 3500
3060 POSITION 20,22:? BLANK$:POSITION 20,22:? "  PRESS START"
3080 IF PEEK(CONSOL)=START THEN 3500.
3090 GOSUB DELAY:POSITION 20,22:? BLANK$:POSITION 20,22
3110 IF  NOT RACED THEN ? "    PRESS  START":GOTO 3130
3120 ? "  ";CHAMP$;" WON IN ";RTIME$;
3130 IF PEEK(CONSOL)<>START THEN NEXT I:GOTO 3002
3500 POP :POKE 77,0
3510 POSITION 0,22:? " blue ";CHR$(140);"time";CHR$(140);" red";CHR$(140)
3520 POSITION 20,22:? BLANK$:FOR P=0 TO 1SOUND P,186,4,6:NEXT P
3600 POSITION 24,22:? "go! go! go!":GOSUB DELAY
3630 IF STICK(0)<>15 OR STICK(1)<>15 THEN 3700
3640 POSITION 24,22:? "go! go! go!":GOSUB DELAY
3680 IF STICK(0)=15 AND STICK(1)=15 THEN 3600
3700 POSITION 20,22:? BLANK$;
3800 POKE 77,0:FOR K=14 TO 2 STEP -1:SOUND 0,40,0,K:NEXT K
3900 RETURN
3990 REM *** DELAY
4000 FOR K=0 TO 50:NEXT K:RETURN
7999 REM *** INITIALIZE
8000 SETCOLOR 1,1,0:SETCOLOR 2,13,10:SETCOLOR 4,11,2
8100 CONSOL=53279:START=6:SMDCTL=559:POKE 752,1
8120 RACELAPS=10:BEST=6000:RACED=0
8140 SHOW=1000:CARS=2000:INFO=3000:DELAY=4000
8220 ? "You are presented with a birds-eye view"
8230 ? "of a motor racing circuit. A blue car"
8240 ? "and a red car are ready at their start-"
8250 ? "ing positions. The race is over ";RACELAPS;" laps"
8260 ? "of the track (in clockwise direction)."
8270 ? "Try to break the track record or beat"
8280 ? "the other car to the finishing line!"
8290 ? "Use a joystick to drive your car (BLUE)"
8300 ? "in jack 1 and RED in jack 2); press the"
8310 ? "trigger to go at full spsed. The race"
8320 ? "begins when either stick is moved. The"
8330 ? "time is measured in tenths of seconds."
8340 ? "If you crash, your car is put back to"
8350 ? "the beginning of it's current lap."
8360 ? "To restart the race at any time, press"
8370 ? "the START key."
8390 ? "        PRESS START";
8400 IF PEEK(CONSOL)<>START THEN 8400
8500 FOR I=1 TO 2:POSITION 12,23:? "wait 15 seconds"
8520 GOSUB DELAY:POSITION 12,23:? "               ":GOSUB DELAY:N
EXT I
9000 RAMTOP=106:MYTOP=PEEK(RAMTOP)-12:POKE RAMTOP,MYTOP:MEN=MYTOP*256
9020 GRAPHICS 0:SETCOLOR 4,11,2:POKE SMDCTL,0:POKE(560)*256*PEEK(561)
9040 POKE D+3,68:FOR I=D+6 TO D+26:POKE D,1:NEXT I:POKE D+27,6:POKE D+28,6
9100 CHIGH=206:COUNT=207:PCOL=704:PP=1536:PC=1544:PX=1548:FY=1552
9110 CRASH=1560:SKID=1562:LAPS=1564:LINE=1566
9130 FMBASE=54279:GRACTL=53277:GPRIOR=623:CHBAS=756
9150 DIM X$(6),N$(6),FX(1),FY(1),PCOL(3),CHAMP$(4),BLANK$(20),RTIME$(5)
9160 CHAMP$="                    "
9190 DIM FILL$(17):FOR I=1 TO 17:READ J:FILL$(I)=CHR$(J):NEXT I
```

```
9210 DATA 104,104,104,133,208,160,0,132,207,104,104,145,207,200,208,251,96
9220 DIM COPY$(23):FOR I=1 TO 23:READ J:COPY$(I)=CHR$(J):NEXT I
9230 DATA 104,104,104,133,208,160,104,133,208,160,0,132,207,104,104,145,
     207,200,208,249,96
9249 REM CHARSET
9250 FOR I=0 TO USR(ADR(COPY$),224+I,MYTOP+I):NEXT I
9260 FOR I=24 TO 127:READ J:POKE MEM+I,J:NEXT I:POKE CHBAS,MYTOP
9270 DATA 85,85,35,35,85,85,85,85
9272 DATA 1,13,13,5,21,213,213,85
9274 DATA 85,37,87,87,84,80,112,112,64
9276 DATA 64,112,112,80,84,87,87,85
9278 DATA 85,213,213,21,5,13,13,1
9280 DATA 245,85,85,85,85,85,85,85
9282 DATA 85,35,35,35,85,85,85,95
9284 DATA 213,213,213,21,5,85,85,85
9286 DATA 85,35,35,35,87,87,87,87
9288 DATA 0,12,51,0,0,48,204,0
9290 DATA 101,101,101,101,101,101,101,101
9292 DATA 48,12,48,12,48,12,48,12
9294 DATA 0,0,255,0,255,0,255,0
9299 REM PMG
9300 FOR I=MYTOP+8 TO MYTOP+11:K=USR(ADR(FILL$),I,0):NEXT I
9310 K=USR(ADR(FILL$),6,0):POKE PMBASE,MYTOP+4:POKE GPRIOR,33
9340 FOR I=0 TO 3:POKE PP+I,MYTOP+8+I:NEXT I
9350 FOR I=1605 TO 1611:READ J:POKE I,J:NEXT I:DATA 32,48,16,0,48,32,16
9380 PCOL(0)=122:PCOL(1)=58:PCOL(2)=254:PCOL(3)=254
9390 PX(0)=158:PX(1)=166:FY(0)=54:FY(1)=54
9400 FOR I=0 TO 79:READ J:POKE MEM+1792+I,J:NEXT I:POKE CHIGH,MYTOP+7
9420 DATA 0,24,36,24,24,24,24,0
9424 DATA 0,36,36,0,0,36,36,0
9428 DATA 0,0,60,60,60,60,0,0,0
9430 DATA 0,36,36,0,0,36,36,0
9440 DATA 0,16,56,56,28,28,8,0
9450 DATA 16,16,0,36,36,0,8,8
9470 DATA 0,8,28,28,56,56,16,0
9480 DATA 8,8,0,36,36,0,16,16
9482 DATA 73,235,126,63,124,254,91,16
9484 DATA 33,132,16,16,8,8,64,16
9499 REM VBI
9500 FOR I=1700 TO 1709:READ J:POKE I,J:NEXT I:POKE 1702,MYTOP+4
9520 DATA 104,162,0,160,0,169,7,76,92,228
9550 FOR I=MEM+1024 TO MEM+1346:READ J:POKE I,J:NEXT I:K=USR(1700)
9600 DATA 216,162,1,189,24,8,208,66,214,207,208,62,188,132,2,200
9610 DATA 152,24,125,28,6,149,207,188,120,2,162,255,189,13,8,209,3,254
9620 DATA 12,6,152,41,4,208,3,222,12,6,152,41,2,208,6,254
9630 DATA 16,6,254,16,6,152,41,1,208,6,222,16,6,222,16,6
9640 DATA 192,15,240,6,185,64,6,157,8,6,138,168,200,200,24,189
9650 DATA 8,6,105,8,153,8,6,189,12,6,153,12,6,189,16,6
9660 DATA 153,16,6,202,16,157,162,1,189,24,6,208,55,138,10,168
9670 DATA 169,0,153,1,210,189,120,2,201,15,240,40,169,38,153,1
9680 DATA 210,189,20,6,240,5,169,6,153,1,210,189,120,2,74,133
9690 DATA 209,189,132,2,208,4,169,0,240,2,169,8,141,0,210,209,105
9700 DATA 36,153,0,210,202,16,193,162,1,160,0,189,4,208,41,2
9710 DATA 240,1,200,189,16,6,240,9,152,208,12,157,30,6,254,28
9720 DATA 6,152,240,3,157,30,6,169,0,157,26,6,189,4,208
9730 DATA 8,208,7,189,12,208,41,3,240,7,169,1,157,24,6,208
9740 DATA 37,189,4,208,8,208,7,189,20,157,26,6,208,25,41,4,208
9750 DATA 18,138,168,200,200,185,4,208,41,4,208,7,185,12,208,41
9760 DATA 12,240,3,254,26,6,202,16,160,141,30,208,162,3,189,0
9770 DATA 6,133,204,189,4,6,133,203,169,0,160,255,200,145,203,192
9780 DATA 7,208,249,189,16,6,157,4,6,133,203,189,8,6,133,205
```

28

```
9790 DATA 177,205,145,203,136,16,249,189,12,6,157,0,208,202,16,206,76,98,228
9889 REM DRAW TRACK
9890 POSITION 0,0
9900 ? "$(((((((((((((((((((((((((((((((((-((((((((((((((((&"
9901 ? "*########)))))))########-########))))*"
9902 ? "*###)))% ///// )))))-)######)))))##*"
9903 ? "  ##&  ...  /// /// %%))))%///##*"
9904 ? "  ##&         ////////////*"
9905 ? "  ##+     $((((((((((((((((@  *#+"
9906 ? "  $##+    $#############)#####*   *#*"
9907 ? "  $###%, $###)))))))))###### /// %#*"
9908 ? "  $###%, $###% /// /// //##+   *#+"
9909 ? "  *###%, *###%  *+.*#+*+"
9910 ? "  *##+, *##%  $((( (&   ##&, *#+.*#+*+"
9911 ? "  *#+, *##%     $#####+    $#%*  *#+.*#+*+"
9912 ? "  *#+, *#%      $#####+    ###%*  *#+.*#+*+"
9913 ? "  *#+, *#%      $#####+   $#%#%*  *#+.*#+*+"
9914 ? "  *#+, *#%      $#####+   ###(((#%*  *#+*+"
9915 ? "  *#+, *#%     $###%   ###((((((&*  *#+*+"
9916 ? "  *#+, *#%,.$###%     ........   *#+*+"
9917 ? "  *#+, $###%,$###%          *#+*+"
9918 ? "  *#+$###%,.*###(((((((((((((((((&*#+*+"
9919 ? "  *#+$###%,.*###############-#######%#*+"
9920 ? "  *#######%,################-#######%#*+"
9921 ? "  *))))%   /// *##################(&*+"
9950 POKE 708,0:POKE 709,236:POKE 710,152:POKE 711,174:POKE 712,178
9960 POKE SDMCTL,62:POKE GRACTL,2:POKE 752,1
9999 RETURN
```

SKYCAPERS

The economic situation is dire. Failed businessmen are leaping out of the windows of high-rise buildings at an alarming rate.

And this does make the Inland Revenue very unhappy. Just think of all the lost taxes.

You have been recruited into the ranks of the taxmen in an effort to stop these businessmen avoid paying their dues.

You must position a trampoline below the

• AMSTRAD

falling executive and bounce him into the waiting arms of the taxman. Your wages will depend on how much money the taxman can collect. Allow too many businessmen to hit the floor and you'll be sacked.

• David Mclean

```
1 '**** SKYCAPERS ****
2 '**** BY DAVID MCLEAN ****
3 '****         &        ****
4 '** ALAN  GORTON  **
5 KEY 139,"mode 2 Pen 3 Paper 0 cls:list
"+CHR$(13):KEY 138,CHR$(140)
6 IF flag=0 THEN GOSUB 5000:flag=1
8 GOSUB 8000
9 ll%=0:IF i=1 THEN GOSUB 10000
11 MODE 1
15 screen%:doll%=100:poun%=200
16 lives%=3:man%=1:sc%=0
30 x%=INT(1+29*RND(1)):y%=6:dx%=1:dy%=1
50 GOSUB 6000
60 GOSUB 3000
62 LOCATE man%,23:PRINT top$ PEN 0 :LOCAT
E man%,24:PRINT bottom$
65 '**** Main Loop ****
70 GOSUB 1000
```

```
80 j=JOY(0):IF j=0 THEN FOR t=1 TO 43:NE
XT
85 IF j=4 AND man%-1>0 THEN GOSUB 2010
90 IF j=8 AND man%+1<29 THEN GOSUB 2040
100 IF scf%=1 THEN GOSUB 4500:scf%=0
110 IF ll%=1 THEN GOSUB 4000
195 GOTO 70
999 '**** Move Suicide Merchant ****
1000 IF y%>1 THEN LOCATE x%,y%:PRINT CH
R$(32) ELSE z%=0
1010 x%=x%+dx%:IF x%>30 OR x%=1 THEN dx%
=-dx%:SOUND 1,200,15,5
1020 y%=y%+dy%:IF y%>6 THEN SOUND 1,200,
15,5:GOSUB 3000
1022 IF y%=23 THEN GOSUB 1030
1025 IF y%=23 AND x%>man%+1 AND x%<=man
%+2 THEN ll%=1 ELSE dy%=-dy%:SOUND 1,200,
0,15,5 %
1030 FOR t=1 TO screen%:IF y%=cloudy(t)
```

```
AND x%=cloudx(t) AND  x%<cloudx(t)+3 TH
EN d%=-d%:z%=1:SOUND 1,200,15,5
1035 NEXT
1037 IF z%=1 THEN GOTO 1060
1040 LOCATE x%,9%
1050 PRINT CHR$(CHR$(193+44RND(1)))
1060 x%=b+1 IF b=3 THEN GOSUB 1500:b=0
1499 RETURN
1500 '**** Move Bailiff ****
1510 bailiff=bailiff+1 IF bailiff=30 THE
N LOCATE bailiff,6 PRINT CHR$(32)CHR$(3
2)CHR$(11)CHR$(8)CHR$(32)bailiff=1
1520 LOCATE bailiff,6 PRINT bailiff
1530 PEN 3 LOCATE bailiff+2,6 PRINT head
$
1540 PEN 0
1550 Poun=Poun-1 PEN 1 LOCATE 2,3 PRIN
T"#";Poun% SOUND 2,1,5,15
1560 IF Poun%<1 THEN GOTO 4000
1570 PEN 0 b=0
1599 RETURN
2000 '**** Move Stretcher Team ****
2010 LOCATE man%,24 PEN 3 PRINT CHR$(
32)CHR$(10)CHR$(8)CHR
$(32) man%=man%+1
2020 LOCATE man%,24 PEN 3 PRINT bottom$
2030 LOCATE man%,24 PEN 0 PRINT bottom$
2035 RETURN
2040 LOCATE man%,23 PRINT CHR$(32)CHR$(
32)CHR$(8)CHR$(32) man%=man%+1
2050 LOCATE man%,23 PEN 3 PRINT CHR$(32
)CHR$(11)CHR$(8) CHR
$(32) man%=man%+1
2060 LOCATE man%,23 PEN 0 PRINT CHR$(32
)CHR$(11)CHR$(8) CH
R$(32) man%=man%+1
2070 LOCATE man%,23 PEN 3 PRINT top$
2999 RETURN
3000 '**** Collisions? ****
3010 IF x%=bailiff AND x%<bailiff+3 THE
N sc%=1 SOUND 2,16,20,15,1,10
3020 d%=-d%
3999 RETURN
4000 '**** Lose A Life ****
4010 lives=lives-1 IF lives%1 THEN GO
TO 9000
4015 LOCATE 18,2 PEN 3 PRINT"MEN";lives
%
4020 PEN 2 LOCATE 15,12 PRINT"AAARGH !";
SOUND 1,500,15,15,5,5,12
4100 l%=ld+1 PEN 2 LOCATE 18,2 PRINT"MEN";lives
4110 FOR t=1 TO 400 NEXT
4100 man%=15
4110 GOTO 30
4500 '**** Score ****
4505 sc%=sc%+Poun%
4510 PEN 3
4520 LOCATE 2,2 PRINT"1UP";sc%
4530 dol%=100 Poun%=200
4525 PEN 2 LOCATE 30,3 PRINT"#";Poun% LOC
ATE 30.3 PRINT"$";dol%
4540 screen%=screen%+1
5000 '**** Characters ****
5010 SYMBOL AFTER 139
5020 SYMBOL 193,2,5,10,140,80,36,216,192
5030 SYMBOL 194,192,220,32,80,144,144,22
5040 SYMBOL 195,130,68,36,28,42,75,83,0
5050 SYMBOL 196,12,62,34,66,32,140,49'
5060 SYMBOL 146,238,0,187,0,238,0,187,0
5070 SYMBOL 197,63,127,127,255,255,127,6
3,14
5080 SYMBOL 198,12,190,191,223,255,255,2
51,112

5090 SYMBOL 199,56,124,126,254,252,248,1
12
5095 SYMBOL 207,0,0,0,0,60,126,126,255
5100 SYMBOL 200,62,88,170,95,182,120,60,
24
5120 SYMBOL 202,60,94,33,221,247,15,126,
60
5125 SYMBOL 203,126,118,247,251,60,118,1
02,119
5130 SYMBOL 204,0,0,0,255,127,128,0,0
5140 SYMBOL 205,126,110,239,223,60,110,1
02,238
5145 SYMBOL 206,0,0,0,255,254,1,0,0
5150 SYMBOL 208,126,126,239,223,60,110,1
02,119
5160 SYMBOL 209,252,42,21,255,255,143,4,
7
5170 '**** Set character strings ****
5180 bottom$=CHR$(203)+CHR$(9)+CHR$(9)+C
HR$(205)
5190 top$=CHR$(9)+CHR$(10)+CHR$(204)+C
HR$(206)+CHR$(11)+CHR$(202)
5200 cloud$=CHR$(197)+CHR$(198)+CHR$(199
)
5210 bailiff$=CHR$(32)+CHR$(209)+CHR$(11
)+CHR$(8)+CHR$(208)+CHR$(207)
5220 head$=CHR$(200)
5999 RETURN
6000 '**** Set Screen Up ****
6010 MODE 1 PAPER 0 CLS
6020 BORDER 11 PAPER 1 CLS
6030 a$(1)="
6040 a$(2)="
6045 PEN 0 PAPER 0
6050 FOR t=5 TO 25 LOCATE 32,t PRINT a$(
1) NEXT
6060 FOR t=5 TO 25 STEP 4 LOCATE 32,t PR
INT a$(2) NEXT
6070 PLOT 1,340,0 DRAW 636,340,0 DRAW 63
6,399,0 DRAW 1,399,0 DRAW 1,340,0
6080 PAPER 2.2 PEN 3 PRINT"1UP"
;sc% LOCATE 2,2 PRINT"Hi";hi% PEN 2 LOC
ATE 2,3 PRINT"#";Poun% LOCATE 30,3 PRINT"$";doll% LOCATE 3,3 PRINT"$";lives
6999 RETURN
8000 '**** Title Screen ****
8005 INK 1,11 INK 2,6 INK 0,0 INK 3,26 M
ODE 1 PAPER 1 CLS
8010 a$="S Y A E S" b$="  K C P R"
8020 IF yc=1 THEN yc=cy=1 ELSE yc=1:cy
=2
8030 PEN 0 LOCATE 4,8 PRINT"--- The Cast"
PEN 2 LOCATE 4,8 PRINT"    ----"
8040 PEN 3 LOCATE 4,10 PRINT top$ PEN 0
LOCATE 4,11 PRINT bottom$"     ..... Fred
& Bill"
8050 LOCATE 5,13 PRINT bailiff$ PEN 3 LO
CATE 7,13 PRINT head$ PEN 0 PRINT"
..... Super Bailiff"
8060 LOCATE 6,15 PRINT CHR$(196)";"      ..
... The Debtter
8070 PEN 3 LOCATE 5,17 PRINT cloud$ PEN
0 PRINT"     ..... The Cloud"
8000 PEN 2 LOCATE 10,20 PRINT"Press i fo
r instructions" LOCATE 10,22 PRINT"Press
any key to Play"
8085 PEN 3 LOCATE 16,yc PRINT t$ PEN 0 L
```

```
OCATE 16,cy:PRINT b$
8090 c$=INKEY$:IF c$="" THEN 8020
8100 IF c$="i" OR c$="I" THEN s=1
8999 RETURN
9000 '### Game over ####
9010 a$=CHR$(147)
9020 PEN 2:LOCATE 18,2:PRINT"MEN";lives%
9035 PEN 0
9040 IF sc%>hi% THEN hi%=sc%
9050 FOR t=1 TO 9 1=MID$(a$,t,1):LOCATE
  t+14,12:PRINT 1$: FOR s=1 to 200:NEXT
9060 NEXT
9999 GOTO 8
10000 'Instructions
10010 MODE 1:PEN 1:PAPER 1:CLS:LOCATE 14
  ,1 PRINT"Instructions"
10020 LOCATE 14,2:PRINT"-----------"
10030 PRINT:PRINT"Once upon a time in th
  e city of London acertain female Politic
  ian who will    remain unamed, became
```

Prime Minister of Jolly old England.
10040 PRINT"Suddenly Jolly old England b
ecame not soJolly as the # went down aga
inst the
10050 PRINT"As this happened the People
of England became bankrupt and started
commiting suicide."
10060 PRINT:PRINT"You guide Fred & Bill
the tax collectorsleft & right with your
joystick to try to bounce the people u
p to SUPER BAILIFFat the top of the scre
en."
10070 PRINT"If you do this you get the t
ax   the   person owes you if you don't
before the # reaches 0 then you lose a
life."
10080 PRINT:PRINT:PRINT:PRINT:Pr
ess a key to start"
10090 c$=INKEY$:IF c$="" THEN 10090
10100 RETURN

LOW LEVEL

• CBM 64

Test your flying skills as you fly close to the ground to avoid enemy radar, miss buildings and dodge the hostile planes they swoop down from the sky.

You don't have any weapons system but you do have large fuel reserves. But are you up to facing this ordeal?

Words inside square brackets are converted Commodore graphic symbols. For instance [CLEAR] means press SHIFT and CLR/HOME key.

The ∧ symbol, which appears in a number of lines, is the up-arrow ↑ (just to the left of the restore key).

• Ian Brown

```
10 POKE18025,0:POKE18020,1:POKE18020,0
11 REM ** ENABLE ALL 8 SPRITES
12 REM ** ENABLE ALL 8 SPRITES **
13 V=53248:POKEV,21,255
15 REM ** SET ALL SPRITES TO MULTICOLOUR MODE **
16 POKEV+28,255
17 REM ** COLOUR ALL SPRITES **
18 POKEV+37,0:REM MULTICOLOUR 1
19 POKEV+38,12:REM MULTICOLOUR 2
20 POKEV+39,15:POKEV+40,15:POKEV+45,15:REM COLOUR SPRITES 0,6,7 LIGHT GREY
21 POKE53280,6:POKE53281,0:REM BACKGROUND AND BORDER BLUE
22 PRINT"[CLEAR][WHITE]LOW LEVEL WAS WRITTEN BY IAN BROWN."
23 PRINT"GRAPHICS BEING DEFINED AND MACHINE CODE BEING ENTERED.[RIGHT]PLEASE WAI
  T..."
24 REM ** DISABLE I/O AND KEYBOARD SCAN **
25 POKE56334,PEEK(56334)AND254:POKE1,PEEK(1)AND251
26 REM ** COPY FIRST 63 CHARACTERS FROM ROM **
32 FORI=0TO63:FORJ=0TO7:POKE12288+I*8+J,PEEK(53248+I*8+J):NEXTJ:NEXTI
34 REM ** ENABLE I/O AND KEYBOARD SCAN **
36 POKE1,PEEK(1)OR4:POKE56334,PEEK(56334)OR1
35 REM ** COPY IN PROGRAMMABLE CHARACTERS FROM DATA STATEMENTS **
36 FOR I=1TO13:READCHAR:FORJ=0TO7:READNO:POKE12288+CHAR*8+J,NO:NEXTJ:NEXTI
38 REM ** COPY IN CHARACTERS FOR THE SPRITES **
40 FORX=0TO129:POKE832+X,0:NEXTX
41 REM ** COPY IN PLANE CONTROLLED BY PLAYER FROM DATA STATEMENTS **
42 FORX=0TO63:READO:POKE832+X,Q:NEXTX
43 REM ** COPY IN ENEMY PLANE FROM DATA **
44 FORX=0TO34:READO:POKE896+X,Q:NEXTX
59 REM ** SET CHAR MEMORY POINTER TO MEM. 12288 ***
```

```
60 POKE53272,(PEEK(53272)AND240)+12
69 REM ** ENABLE MULTICOLOUR MODE PROG. CHARS. ***
70 POKE53270,PEEK(53270)OR16
71 POKE53282,11:REM MULTICOLOUR 1
72 POKE53283,0: REM MULTICOLOUR 2
78 REM ** POKE DATA FOR M/C SCROLLING ROUTINE INTO MEMORY **
80 FORX=0TO97:READQ:POKE16384+X,Q:NEXTX
84 REM ** POKE DATA FOR M/C ROUTINE MOVING ENEMY PLANE 1 INTO MEMORY **
85 FORX=0TO49:READQ:POKE16500+X,Q:NEXTX
88 REM ** POKE DATA FOR M/C ROUTINE MOVING ENEMY PLANE 2 INTO MEMORY **
89 FORX=0TO49:READQ:POKE16600+X,Q:NEXTX
94 REM ** POKE DATA FOR M/C ROUTINE MOVING ENEMY PLANES 3 AND 4 INTO MEMORY **
95 FORX=0TO89:Q=PEEK(16600+X):P=Q:IFQ=4THENF=50
96 IFX=5THEN102
97 IFQ=90THEN104
98 POKE16700+X,Q:POKE16800+X,P:NEXTX:GOTO107
100 IFPEEK(16601+X)=208THENQ=7:P=9
101 GOTO99
102 IFPEEK(16601+X)=208THENQ=7:P=9
103 GOTO99
104 IFPEEK(16601+X)=70THENQ=91:P=92
105 GOTO99
106 POKE16714,8:POKE16716,8:POKE16723,247:POKE16739,8:POKE16744,140
107 POKE16814,16:POKE16816,16:POKE16823,239:POKE16839,16:POKE16844,180
108 REM ** POKE IN M/C ROUTINE MOVING ENEMY PLANE 5 INTO MEMORY **
110 FORX=0TO49:Q=PEEK(16500+X):IFQ=2THEN118
111 IFQ=50THEN115
112 POKE16900+X,Q:NEXTX:GOTO118
113 IFPEEK(16501+X)=208THENQ=10
114 GOTO112

115 IFPEEK(16501+X)=208THENQ=11
116 GOTO112
118 POKE16914,32
119 POKE16916,32
120 POKE16923,223
121 POKE16939,32
122 POKE16944,155
124 REM ** POKE IN M/C CONTROL ROUTINE FROM DATA **
125 FORX=0TO36:READQ:POKE17000+X,Q:NEXTX
127 REM ** POKE IN M/C ROUTINE MOVEING PLANE CONTROLLED BY PLAYER FROM DATA **
128 FORX=0TO93:READQ:POKE17100+X,Q:NEXTX
129 REM ** POKE IN M/C ROUTINE CHECKING FOR COLLISIONS FROM DATA **
130 FORX=0TO27:READQ:POKE17200+X,Q:NEXTX
132 REM ** POKE IN M/C ROUTINE MAKING PLANE ENGINE SOUND EFFECT **
133 FORX=0TO37:READQ:POKE17300+X,Q:NEXTX
138 GOTO747
173 REM *** SET UP BACKGROUND ***
174 PRINT"[CLEAR][DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][c
     #[[\                        "
175 PRINT"[c 4] #[[\ #[[\ #[[\ ]^^^
176 PRINT"[c 8] ]^^^ ]^^^ ]^^^ $&' $&'  $&' #[[\
177 PRINT"[c 6] ]^^^ ]^^^ ]^^^   #   #  ]^^^ ]^^^
178 PRINT"[c 6]]!!)_!!!)_!!!)))))))_!!!)))_!!!) "
179 PRINT"[DOWN]
180 PRINT"[CYAN]    )   )))   )    [GREEN]    )   )))   )    )))
181 PRINT"[CYAN]    )   )   )    [GREEN]    )   )   )    )
182 PRINT"[CYAN]    )   )   )    [GREEN]    )   )   )    )
183 PRINT"[CYAN]    )   )))   )    [GREEN]   )))   )    )
184 PRINT"[CYAN]    )   )))   )    [GREEN]  )))   )    ))) )))[UP][UP][UP][UP][U
P][UP][WHITE]
185 REM ** COLOUR & CHARACTER SPACES AT THE RIGHT OF THE SCREEN **
186 POKE55855,15:POKE55815,15:POKE55775,11:POKE55735,11
187 REM ** CONTROL VERTICAL STARTING DIRECTION OF SPRITES 2,3,4 **
188 POKE18010,0:POKE18011,0:POKE18012,222
189 REM ** SET SPRITE POINTERS TO THE AREAS OF MEMORY WHICH CONTAIN THE DATA **
198 POKE2040,13:POKE2046,13:POKE2047,13:REM SPRITES 0,6,7,BLOCK 13
199 POKE1705:POKE2040-X,14:NEXTX:REM SPRITES 1 TO 5 ,BLOCK 14
200 REM ** POSITION SPRITES FOR START **
```

```
201 POKE53248,60:POKE53249,70:REM SPRITE 0
202 POKE53248,126:POKE53250,100:POKE53251,70:REM SPRITE 1
203 POKE53252,25:POKE53253,110:REM SPRITE 2
204 POKE53254,100:POKE53255,55:REM SPRITE 3
205 POKE53256,170:POKE53257,85:REM SPRITE 4
206 POKE53258,125:POKE53259,100:REM SPRITE 5
207 POKE53260,0:POKE53261,176:REM SPRITE 6
208 POKE53262,50:POKE53263,176:REM SPRITE 7
249 REM ** CLEAR COLLISION DETECTION LOCATIONS **
250 POKEV+30,255:K=PEEK(V+30):POKEV+31,255:K=PEEK(V+31)
699 REM ** CALL M/C ROUTINES.INCREASE SCORE AND CHECK IF LIFE LOST **
700 SYS17000:IFPEEK(18020)<>0THEN700
701 IFPEEK(18026)<>0THENS=S+1:PRINT"[UP]      SCORE ";S:GOTO700
702 REM ** LIFE LOST **
703 POKE18026,1
705 REM ** SOUND EFFECT **
706 POKEW,15:POKE54295,0
707 W=54272:POKEW+6,0:POKEW+5,12:POKEW+1,20:POKEW+4,129:FORN=1TO2200:NEXTN
708 POKEW+4,0
734 IFPEEK(V+21)=255THENPOKEV+21,191:GOTO174
735 IFPEEK(V+21)=191THENPOKEV+21,63:GOTO174
736 IFS>HTHENH=S
738 PRINT"[HOME][WHITE][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][
RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT]GAME OVER"
739 FORX=1TO4000:NEXTX
746 REM ** TITLE SCREEN **
747 POKEV+21,192:PRINT"[CLEAR][DOWN][RIGHT][RIGHT][RIGHT][RIGHT][RIG
HT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT]
LOW LEVEL"
748 POKE2046,13:POKE2047,13:POKEV+14,74:POKEV+15,70
749 POKEV+12,10:POKEV+13,70
750 PRINT"[DOWN][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][
RIGHT][RIGHT][RIGHT][YELLOW]HIGH SCORE[WHITE]";H
752 PRINT"[DOWN][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][
RIGHT][RIGHT][RIGHT][YELLOW]LAST SCORE[WHITE]";S
754 PRINT"[DOWN][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][
RIGHT][YELLOW]USE JOYSTICK IN PORT 2"
756 PRINT"[DOWN][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][RIGHT][
RIGHT]OR THE FOLLOWING KEYS[DOWN]"
758 PRINTSPC(15)"[WHITE]A[YELLOW] - UP"
760 PRINTSPC(15)"[WHITE]Z[YELLOW] - DOWN"
762 PRINTSPC(15)"[WHITE]; [YELLOW] - LEFT"
764 PRINTSPC(15)"[WHITE]= [YELLOW] - RIGHT[WHITE]"
766 PRINT"[DOWN]AFTER BOMBING AN ENEMY INSTALLATION YOU ARE RETURNING HOME,OUT O
F ";
768 PRINT"AMMO BUT HIGH ON FUEL. YOU MUST FLY LOW OVER THE CITY SO AS TO ";
770 PRINT"FLY UNDER THE ENEMY RADAR.   AVOID THE SUICIDAL ENEMY PLANES WHICH";
772 PRINT"   FLY DIRECTLY IN YOUR PATH AND WATCH OUT FOR THE TOPS OF THE";
774 PRINT" SKYSCRAPERS."
776 PRINT"[DOWN];SPC(6);"[YELLOW]PRESS SPACE OR FIRE TO START[HOME]";S=0
778 IFPEEK(197)=60ORPEEK(56320)=111THEN780
779 GOTO777
780 FORX=0TO13:POKEV+2+X,0:NEXTX:POKEV+21,255:GOTO174
999 REM ** DATA FOR FLATS **
1000 DATA 0,255,191,175,171,169,169,169,169: REM {
1001 DATA 27,255,255,255,255,85,85,105,105: REM }
1002 DATA 28,192,240,252,255,85,85,105,105: REM \
1003 DATA 29,169,169,169,169,169,169,169,169: REM ]
1004 DATA 30,85,85,105,105,85,85,105,105: REM ^
1005 DATA 31,169,233,249,255,255,255,255,255: REM !
1006 DATA 33,85,85,105,105,255,255,255,255: REM !
1009 REM ** DATA FOR PALM TREES **
1010 DATA 35,8,8,8,8,8,8,8,8: REM #
1011 DATA 36,0,0,3,15,63,252,240,195 :REM $
1012 DATA 38,0,48,63,255,63,63,255,200 :REM &
1013 DATA 39,0,192,240,252,63,15,195 :REM '
1014 DATA 40,251,251,251,251,238,238,255,255 :REM (
1015 DATA 41,255,255,255,255,255,255,255,255 :REM )
1019 REM ** DATA FOR PLANE CONTROLLED BY PLAYER **
```

```
1020 DATA 65,80,0,144,84,0,165
1021 DATA 85,80,170,170,148,170,170
1022 DATA 169,170,85,170,170,85,170
1023 DATA 85,85,85,1,84,0,1
1024 DATA 80,0,1,64,0,0,0
1029 REM ** DATA FOR ENEMY PLANES **
1030 DATA 0,5,65,0,21,7,5
1031 DATA 85,95,23,255,255,127,255
1032 DATA 255,255,95,255,255,85,255
1033 DATA 85,85,85,0,21,64,0
1034 DATA 5,64,0,1,64,0,0
1039 REM ** DATA M/C SCROLLING ROUTINE **
1040 DATA 173,144,5,141,80,70,173,184,5,141
1041 DATA 81,70,173,224,5,141,82,70,173,8
1042 DATA 6,141,83,70,173,48,6,141,84,70
1043 DATA 162,1,189,144,5,157,143,5,189,184
1044 DATA 5,157,183,5,189,224,5,157,223,5
1045 DATA 189,8,6,157,7,6,189,48,6,157
1046 DATA 47,6,232,224,40,208,221,173,80,70
1047 DATA 141,183,5,173,81,70,141,223,5,173
1048 DATA 82,70,141,7,6,173,83,70,141,47
1049 DATA 6,173,84,70,141,87,6,96
1050 REM ** DATA FOR M/C ROUTINE MOVING ENEMY PLANE 1 **
1051 DATA 206,2,208,173,2,208,201,0,208,38
1052 DATA 173,16,208,41,2,201,2,208,16,173
1053 DATA 16,208,41,253,141,16,208,169,255,141
1054 DATA 2,208,76,164,64,173,16,208,9,2
1055 DATA 141,16,208,169,100,141,2,208,96,96
1059 REM ** DATA FOR M/C ROUTINE MOVING ENEMY PLANE 2 **
1060 DATA 206,4,208,173,4,208,201,0,208,38
1061 DATA 173,16,208,41,4,201,4,208,16,173
1062 DATA 16,208,41,251,141,16,208,169,255,141
1063 DATA 4,208,76,8,65,173,16,208,9,4
1064 DATA 141,16,208,169,150,141,4,208,173,90
1065 DATA 70,201,0,208,17,206,5,208,173,5
1066 DATA 208,201,50,240,1,96,169,1,141,90
1067 DATA 70,96,238,5,208,173,5,208,201,120
1068 DATA 240,1,96,169,0,141,90,70,96,96
1069 REM ** DATA FOR M/C CONTROL ROUTINE WHICH CALLS ALL OTHER ROUTINES **
1070 DATA 32,116,64,32,216,64,32,60,65,32
1071 DATA 160,65,32,4,66,238,100,70,32,204
1072 DATA 66,173,100,70,201,16,208,8,32,0
1073 DATA 64,169,0,141,100,70,96
1079 REM ** REM M/C FOR MOVING PLANE CONTROLLED BY PLAYER **
1080 DATA 32,148,67,173,0,208,201,126,240,32
1081 DATA 201,125,240,44,201,119,240,44,201,123
1082 DATA 240,56,173,197,0,201,10,240,13,201
1083 DATA 12,240,25,201,36,240,25,201,39,240
1084 DATA 37,96,206,1,208,173,1,208,201,49
1085 DATA 208,5,169,50,141,1,208,96,238,1
1086 DATA 208,96,238,0,208,173,0,208,201,61
1087 DATA 208,5,169,60,141,0,208,96,206,0
1088 DATA 208,173,0,208,201,49,208,245,169,50
1089 DATA 141,0,208,96
1099 REM ** DATA FOR M/C ROUTINE CHECKING FOR COLLISIONS **
1100 DATA 173,31,208,41,1,201,1,240,10,173
1101 DATA 30,208,41,1,201,1,240,1,96,169
1102 DATA 0,141,100,70,141,106,70,96
1109 REM ** DATA FOR M/C ROUTINE MAKING PLANE ENGINE SOUND EFFECT **
1110 DATA 169,0,141,4,212,169,55,141,6,212
1111 DATA 169,4,141,24,212,169,150,141,5,212
1112 DATA 169,6,141,1,212,169,200,141,0,212
1113 DATA 169,33,141,4,212,76,48,67

READY.
```

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Game instructions: (If not included in the listing) ....

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